

UNIVERSIDADE FEDERAL DO PARANÁ

DUNCAN PATRICK CROWLEY

CONSTRUINDO UMA CIDADE SUSTENTÁVEL PELA PARTICIPAÇÃO CIDADÃ:
RESPOSTAS LOCAIS DOS GRUPOS DA SOCIEDADE CIVIL EM CURITIBA,
BRASIL

CURITIBA

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BRASIL

Dissertação apresentada ao curso de Pós-Graduação em Meio Ambiente e Desenvolvimento, Pró-reitoria de Pesquisa e Pós-graduação, Universidade Federal do Paraná, como requisito parcial à obtenção do título de Mestre em Meio Ambiente e Desenvolvimento, na linha de pesquisa Urbanização, Cidade e Ambiente Urbano.

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CURITIBA

2018

FICHA CATALOGRÁFICA

C953c Crowley, Duncan Patrick
Construindo uma cidade sustentável pela participação cidadã:
repostas locais dos grupos da sociedade civil em Curitiba, Brasil /
Duncan Patrick Crowley. - Curitiba, 2018.
250 p.: il., grafs., tabs.

Dissertação (Mestrado) - Universidade Federal do Paraná.
Setor Pró-Reitoria de Pesquisa e Pós-Graduação, Programa de
Pós-Graduação em Meio Ambiente e Desenvolvimento.
Orientador: Clóvis Ultramari
Coorientadora: Cristina de Araújo Lima

1. Desenvolvimento sustentável - Curitiba. 2. Participação do
cidadão. 3. Ecologia humana - Curitiba. I. Ultramari, Clóvis. II.
Lima, Cristina de Araújo. III. Título. IV. Universidade Federal do
Paraná.

CDU 711.4



MINISTÉRIO DA EDUCAÇÃO
SETOR PRÓ-REITORIA DE PESQUISA E PÓS-GRADUAÇÃO
UNIVERSIDADE FEDERAL DO PARANÁ
PRÓ-REITORIA DE PESQUISA E PÓS-GRADUAÇÃO
PROGRAMA DE PÓS-GRADUAÇÃO MEIO AMBIENTE E
DESENVOLVIMENTO

TERMO DE APROVAÇÃO

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DEDICATIONS

This Dissertation is dedicated to mi compañera, my wife Tania Landeo, for her continued battling on all fronts, to my parents Brega and Finbarr for constant love and support and to their parents Maize and Pappy Shannon and Caithlín and Paddy Crowley, from whom values were learned and pathways opened.

THANKS TO

All involved in attempting to improve the world's cities, especially the friends I made in Curitiba. The solutions to Brazil's problems will come from your creativity.

Huge thanks to Clovis, Naina and all the great staff and fellow students at MADE, a special type of Family here in Brazil. Special thanks for Clovis's constant direct responses, guidance and support, I know it wasn't always easy for you.

Thanks to CAPES and the Brazilian government's financial support to undertake this investigation in Curitiba. I hope that whatever outcomes come from this research, or future moments, can contribute to the improvement of Brazilian cities and for the quality of the lives of all men, women and children living there.

Thanks to all the different groups in Curitiba that allowed for normal citizens like myself to participate with them in the various projects to try to transform Curitiba city, especially the 3 groups explored in this work. Keep growing, keep fixing the city.

Special thanks to Patricia and Fernando in the Bicicletaria Cultural, whose constant support and generosity, coupled with their vision and ability to make magic happen, was a great inspiration, for a more ecological city, for art and culture, for climate justice, for women & kids. Hopefully the Asterix books will remind you of us.

To Parque Gomm, Cristo Rei, Jacu, Goto, Iracema, Luca, Ricardo, Rodrigo, Ivo, Goura: To all the bold urban gardeners who created such great spaces, allowed us to dirty our hands with you and share moments of joy in these little areas of magic.

Thanks to the loose network of friends that came together for the "Curitiba Pelo Clima" chapter during COP21 in Paris, still a huge amount to be done, but at least initial steps were taken. From that moment, we shared many adventures together, both as activists and friends; we expect to share many more in future years. To Andressa and her family, when away from home, such warmth means everything.

Huge thanks to "As Cachorras" and "Os Garibaldis". Far more than just a carnival group in the city, their wild spirited vision for a more dynamic and inclusive city and society is so important in today's Brazil. Nello and Julio, you were like our parents here in Brazil, thank you so much for everything... *"The book is on the table"*.

Huge thanks to Luis Fitzpatrick, such generosity & great music, a true friend, and to Bruna for all the invaluable help in putting the finishing touches together.

Lastly, Tania, for constant support and for pushing me to go further. Love you

As our century comes to a close and we go toward the beginning of a new millennium, the survival of humanity will depend on our ecological literacy, on our ability to understand these principles of ecology and live accordingly.

Fritjof Capra

RESUMO

Esta dissertação investiga as ações dos grupos da sociedade civil atualmente ativos na Região Metropolitana de Curitiba, os quais estão tentando criar uma cidade mais sustentável pela participação cidadã. O problema que a dissertação procura explorar é em relação ao que é a realidade atual da cidade identificada nos últimos anos como a “Capital Ecológica” do Brasil, o que tem sido determinado como um dos principais problemas atuais por vários grupos ativos hoje, quais estratégias estão sendo empregadas para resolvê-los e explorar as dinâmicas que envolvem oportunidades para cidadãos normais participarem de processos de mudanças urbano ecológicas. Reconhecendo o impacto histórico da mudança da população global do campo para a cidade acontecendo agora, a dissertação compartilha a posição de muitos que a cidade hoje é a linha de frente na batalha para garantir que a humanidade continue sobrevivendo, diante das graves ameaças colocadas pelas atuais crises globais. A dissertação explora a cidade como um organismo vivo, cujas ações urbanas são analisadas como entidades semelhantes a células, como possíveis catalisadores para a mudança urbana sustentável: Essas ações urbanas podem ser momentos, processos, erupções, alterações no uso da terra ou mudanças construídas no reino urbano. O trabalho é dividido em dois capítulos principais: A revisão literária e estudos de casos. O primeiro explora as origens e desenvolvimentos recentes na teoria e na prática sobre a ideia da Cidade Sustentável e conceitos relacionados, seguido por uma revisão semelhante da Participação Cidadã. O capítulo de estudos de casos é dividido em 5 seções; um resumo da metodologia utilizada, o contexto urbano das cidades brasileiras, respostas locais de Curitiba, análises mais profundas de 3 grupos atualmente ativos em Curitiba, todos com um componente internacional e, por último, resultados e análise de dados. Em relação à Metodologia, o autor utiliza uma abordagem de Pesquisa-Ação Participativa inspirada nos princípios da Ecologia Social: buscar entender o mundo, tentando modificá-lo colaborativamente e acompanhando a reflexão de grupos ativos na Região Metropolitana de Curitiba, e com eles aprendendo. Uma lista inicial de pelo menos 25 grupos ativos é compilada e analisada com base no *4-D Framework*, uma ferramenta desenvolvida para ajudar na construção de comunidades sustentáveis que avalia grupos através dos 4 “pilares fundamentais da sustentabilidade”: Social, Econômico, Ecológico e Visão do Mundo. A partir daí, 3 grupos são selecionados e avaliados para uma análise mais profunda: Cicloaguaçu, um grupo local de defesa da mobilidade urbana, TETO, um capítulo local de uma ONG chilena que trabalha para eliminar a pobreza construindo casas nas cidades de assentamentos informais (favelas) e O Instituto Nhandecy, uma ONG local que co-administra um espaço físico na cidade e é responsável pelos cursos internacionais de “educação GAIA” em Curitiba. Com base na análise das respostas de cada grupo a um questionário e na participação contínua do autor em ações e discussões com cada grupo, os dados são analisados e as conclusões compartilhadas por meio de texto, tabelas e mapas. A dissertação termina com considerações finais, compartilhando percepções decorrentes da pesquisa e recomendações para o futuro.

Palavras-chave: Cidades Sustentáveis. Participação Cidadã. Curitiba. Ecocidades.

ABSTRACT

This dissertation investigates the actions of Civil Society groups currently active in the Metropolitan Region of Curitiba, which are attempting to create a more Sustainable City through Citizen Participation. The problem the dissertation seeks to explore is in regard to what is the current reality of the city celebrated in recent years as Brazil's "Ecological Capital", what have been identified as the current chief problems by various groups active today, what strategies are being employed to resolve them and to explore dynamics surrounding opportunities for normal citizens to participate in processes for ecological urban change. Recognizing the historical impact of the global population shift from the country to the city currently underway, the dissertation shares the position of many that the city today is the frontline in the battle to ensure humanities continued survival, in front of the grave threats posed by today's global crises. The paper explores the city as a living organism, whose urban actions are analysed as cell-like entities, as possible catalysts for sustainable urban change: These urban actions by Civil Society groups can be moments, processes, eruptions, land use changes or built changes in the urban realm. The paper is divided into 2 major chapters: The Literary Review and Case Studies. The first explores the origins and recent developments in both theory and practice regarding the idea of the Sustainable City and related concepts, followed by a similar review of Citizen Participation. The Case Studies chapter is divided into 5 sections; an outline of the methodology used, urban context of Brazilian cities, local responses from Curitiba, deeper analysis of 3 groups currently active in Curitiba who all have an international component and lastly, results & data analysis. Regarding Methodology, the author uses a Participatory Action Research approach inspired by Social Ecology principles: Seeking to understand the world by trying to change it, collaboratively and following reflection, with the author learning about, with and from groups currently active within the Metropolitan Region of Curitiba. An initial list of at least 25 active groups is compiled and analysed based on the 4-D Whole Systems Design Framework, a tool developed to assist in the construction of sustainable communities which assesses groups through the 4 "key pillars of sustainability": Social, Economic, Ecological and Worldview. From this, 3 groups are selected and assessed for deeper analysis: Cicloiguaçu, a local cyclist and urban mobility advocacy group, TETO, a local chapter of a Chilean NGO that works to eliminate poverty by building homes in the cities informal settlements (favelas) and Instituto Nhandecy, a local NGO which co run a physical space in the city and are responsible for the international "GAIA education" courses in Curitiba. Based on analysis of responses by each group to a questionnaire and the author's ongoing participation in actions and discussions with each group, data is analysed and conclusions shared through text, tables and maps. The paper finishes with final considerations, sharing insights from the research and recommendations for the future.

Key Words: Sustainable Cities. Citizen Participation. Curitiba. Ecocities.

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ABBREVIATIONS AND ACRONYMS

15M	- Short for 15th May 2011 / Indignados movement / Spanish Revolution
25+	- At least 25 groups currently active in Curitiba
ABM	- <i>ARTE BICI MOB</i> (short for Art, Bicycle & Mobility)
BEC	- <i>Barcelona en Comú</i> (Barcelona together)
BRT	- Bus Rapid Transit
COMEC	- Coordenação da Região Metropolitana de Curitiba (Coordination of the Metropolitan Region of Curitiba)
CIC	- Cidade Industrial de Curitiba (The Industrial City of Curitiba)
CNCA	- Carbon Neutral Cities Alliance
CP	- Citizen Participation
CSI	- Service Civil International (International Civil Service)
FMB	- Fórum Mundial da Bicicleta (World Bicycle Forum)
GAIA-PR	- GAIA Education Parana
GEDS	- Gaia Education Design for Sustainability
GEESE	- Global Ecovillage Educators for a Sustainable Earth
GEN	- Global Ecovillage Network
GTs	- Grupos do Trabalho (Working Groups)
HAB3	- Habitat III
IBGE	- Instituto Brasileiro de Geografia e Estatística (Brazilian Institute of Geography and Statistics)
IN	- Instituto Nhandecy (Nhandecy Institute)
IPC	- Indices of Citizen Participation in Latin America (Índice de Participação Cidadã na América Latina)
IPPUC	- Instituto de Pesquisa Planejamento Urbano de Curitiba (Urban Research and Planning Institute of Curitiba)
JL	- Jardinagem Libertaria (Libertarian Gardening)
LAEV	- Los Angeles EcoVillage
MDGs	- Millennium Development Goals
MTST	- Movimento dos Trabalhadores Sem Teto (The Homeless Workers Movement)
MoU	- Memorandum of Understanding
MU	- <i>Mancha Urbana</i> (Urban Stain)

MV	- Mutirão da Visita (Visiting event)
NGO	- Non-Governmental Organisation
NUA	- New Urban Agenda
NUC	- Núcleo Urbano Central (Central Urban Nucleus)
NVC	- Non-Violent Communication
NVDA	- Non-Violent Direct Action
PAH	- Plataforma de Afectados por la Hipoteca (Platform for People Affected by Mortgages)
PC	- Permaculture
PDC	- Curso de Permacultura Urbana / Permaculture Design Course
PDT	- Partido Democrático Trabalhista (Democratic Workers Party)
PMCMV	- Programa Minha Casa, Minha Vida (My House, My Life Programme)
PSC	- Programa Cidades Sustentáveis (Sustainable Cities Programme)
PT	- Partido dos Trabalhadores (Workers' Party)
R2C	- The Right to the City
RMC	- Região Metropolitana de Curitiba (Metropolitan Region of Curitiba)
SD	- Sustainable Development
SDGs	- Sustainable Development Goals
SETRAN	- Coordenação de Mobilidade Urbana da Secretaria Municipal de Trânsito (Municipal Secretary of Transit coordination for Urban Mobility)
SG	- Sociedade Global (Global Society)
SM	- Social Movement
TETO-PR	- TETO Brasil - Paraná
TT	- Transition Towns
UAE	- United Arab Emirates
UC	- Unidade de Conservação (Conservation Area)
UFPR	- Universidade Federal do Paraná (Federal University of Parana)
UM	- Urban Mobility
UN	- United Nations
UNEP	- United Nations Environment Programme
USDN	- Urban Sustainability Directors Network
USM	- Urban Social Movement
WCD	- World Carfree Day
WSF	- World Social Forum

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1 RESUMO DA DISSERTAÇÃO

O problema que a dissertação aborda é quais as ações urbanas que estão sendo realizadas atualmente pelos grupos da sociedade civil na cidade de Curitiba. Estas ações abordam as crises globais de hoje e tentam criar soluções locais baseadas na sustentabilidade urbana e na participação cidadã (PC). A dissertação examina minuciosamente esses dois tópicos, explorando a teoria do passado e do presente e as ações urbanas do mundo, para desenvolver uma estrutura de entendimento, a partir da qual, as ações atuais em Curitiba podem ser analisadas. O limite geográfico da pesquisa é a Região Metropolitana de Curitiba (RMC) e o cronograma é limitado às ações urbanas recentes.

Esta dissertação argumenta que hoje a humanidade enfrenta incríveis desafios, devido a crises ambientais e sociais em escala global e que as cidades estão a frente destes. Estando consciente do nível de ameaça representado pelas crises atuais, como Capra (1996, p. 304) delineou: a sobrevivência da humanidade. Devido ao modo de vida, supostamente normal, da civilização industrial do mundo moderno, estamos diante da situação em que “A terra está morrendo rapidamente: suas florestas estão morrendo, seus solos estão morrendo, suas águas estão morrendo, seu ar está morrendo” (SHIVA, 1988, p. xii), devido ao processo contínuo de Urbanização Planetária (MERRIFIELD, 2013) de crescentes demandas de recursos pela população de consumidores das cidades globais em rápido crescimento.

Embora reconhecendo os enormes desafios, a dissertação está esperançosa de que as soluções necessárias possam ser alcançadas para garantir a sobrevivência da humanidade, ainda que com grandes mudanças sociais. A dissertação compartilha a visão de muitos, de que a cidade é a linha de frente dessa transição necessária, por isso ela explora: **Cidade como a solução**. Reconhecendo a contribuição de Curitiba para este tema, lembramos as palavras de seu ex-prefeito e arquiteto Jaime Lerner; “As cidades não são problemas, são soluções” (2007, p. xx). As origens e os desenvolvimentos, no tópico das Cidades Sustentáveis, são examinados, juntamente com os chamados contemporâneos que defendem a necessidade de ir mais além. Novas teorias e exemplos práticos, em várias escalas, são explorados a partir de cidades e comunidades do mundo, incluindo as propostas de Resiliência Urbana (HOPKINS, 2008; NEWMAN ET AL, 2009) e da Cidade

Regenerativa de Girardet (2014). As Nações Unidas também contribuíram para as discussões com seu ambicioso 11º Objetivo de Desenvolvimento Sustentável: tornar as cidades inclusivas, seguras, resilientes e sustentáveis (ONU, 2015), seguido pela Nova Agenda Urbana que foi lançada em Quito, Equador, na Habitat III em 2016. Ambos se baseiam em importantes questões sociais, como a igualdade e a redução da pobreza global.

Explorando ideias que vão além das Cidades Sustentáveis, a dissertação analisa o conceito de Ecocidades. Um termo não totalmente definido, mas que encapsula um sonho utópico do que as cidades ainda podem ser. Qualquer que seja o termo finalmente acordado, ele deve responder aos desafios da cidade inteira e não apenas criar mais formas de comunidades fechadas, isoladas do mundo mais amplo. Na exploração de projetos Ecocity para todos os cidadãos e não para alguns, ao final desta seção a dissertação examina como GEN, a *Global Ecovillage Network*, (Rede Global das Ecoaldeias) poderia fornecer um possível caminho no futuro. Na frente do movimento de resiliência, com mais de 20 anos de experiência de uma comunidade global diversa, a GEN tem uma sólida estrutura teórica e prática a qual pode servir como base para desenvolvimento futuros. O sonho deles, onde “cada aldeia é uma ecoaldeia, cada cidade é uma cidade verde” (JOUBERT, 2017) é construído em torno de uma base comum: comunidades de propriedade local que fazem parte dos processos participativos. O que nos leva a nossa segunda área de investigação.

A dissertação identifica a PC como a capacidade de os cidadãos, pessoas normais, se engajarem e participarem dos sistemas locais, de modo a afetar o mundo ao seu redor, em todas as escalas, do micro ao macro. Esse processo acontece em diferentes esferas do campo político, em processos que se estendem desde o “Nascimento da Democracia” na Grécia há 2.500 anos, com cidadãos ativos formando a base para estruturas e processos justos e saudáveis. Esta seção examina uma série de questões envolvendo esse conceito, tanto na teoria quanto na realidades, desde o “Nascimento da Modernidade” nas ruas revolucionárias de Paris em 1789 até as dinâmicas mais recentes, como as atuais respostas às Crises Globais de Hoje, incluindo; O Direito à Cidade, Soluções Municipalistas e Revoltas Urbanas na Idade da Rede. Esta seção também inclui análises de experiências que estão acontecendo hoje, as quais estão radicalmente empurrando as fronteiras do nosso entendimento, enquanto também inspiram projetos semelhantes em todo o

mundo. A dissertação examina a revolução confederalista em Rojava, inspirada na teoria da Ecologia Social de Murray Bookchin e nas soluções das Cidades Rebeldes da Espanha. No primeiro, examina-se as estruturas de rede para governança de baixo para cima, no segundo, é dada atenção a vários aspectos das técnicas de comunicação usadas em Barcelona para permitir que a "Revolução Democrática Feminista" se desdobre.

Depois de delinear a estrutura da Metodologia, a seção **Estudos de Caso** avalia o Brasil e a rápida mudança da cidade secundária de Curitiba. Os países em desenvolvimento são o lugar onde as maiores mudanças de urbanização no planeta aconteceram nos últimos tempos. O acelerado processo de urbanização do Brasil na segunda metade do século XX teve um aumento de dez vezes na população da RMC em Curitiba devido à migrações rural-urbanas.

Curitiba é vista como líder na área do urbanismo de base ecológica desde a década de 1970; sendo a localização do 4ª *Ecocity World Summit* da *Ecocity Builders* em 2000, ganhando o *Globe Forum Sustainable City Award* de 2010 e a revista *The Ecologist* rotulando-a como “a Cidade mais verde da Terra” em 2014 (BARTH). Além disso, em 1996, a ONU chamou de “a cidade mais inovadora do mundo”. Muitos acham que desde o início da década de 1990 a cidade “descansou sobre seus louros” (IRÁZABAL, 2009) e falhou em resolver sérios desafios crescentes que surgiram desde então. De fato, como Mendonça (2002), Moura (2009) e outros apontaram, existem duas Curitiba hoje. Uma é a “Capital Ecológica”, conhecida e celebrada em todo o mundo: a outra é a periferia de Curitiba, desconhecida, não amada, temida, até mesmo pelas próprios cidadãos curitibanos.

Há partes de Curitiba que funcionam fantasticamente em termos de design urbano compacto, inovações de transporte que mudam o mundo e a maior cota per capita de área verde da planeta; Mas, existem outras áreas com esgoto a céu aberto, sem infraestrutura, problemas sociais graves e pouca assistência, onde é quase impossível se mover após as fortes chuvas regulares que a cidade experimenta. Desde os anos 80, tem havido um crescimento maciço de assentamentos informais (favelas) na periferia da cidade que vem crescendo rapidamente. Em 2000, a RMC era a 5ª área urbana com o maior número de favelas no Brasil (ALBUQUERGUE, 2007). A cidade hoje não é apenas o município de Curitiba, é uma entidade que atravessa fronteiras municipais e exige uma resposta

combinada de todas as prefeituras que trabalham juntas. Como grande parte do Brasil, existem grandes divisões entre comunidades mais antigas no centro de Curitiba e comunidades mais novas na periferia, baseadas na ignorância, preconceito e medo. Infelizmente, Curitiba recentemente se tornou uma das cidades mais violentas do Brasil. Reconhecendo que os primeiros sucessos de planejamento urbano e planejamento de Curitiba ocorreram de cima para baixo, esta dissertação acrescenta crescentes apelos para que o governo de Curitiba envolva todos os cidadãos no processo de planejamento de forma mais completa, para aumentar sua participação democrática no processo de criar a cidade.

Esta dissertação é baseada na esperança. A exploração mostrou que há alguns processos novos muito interessantes na cidade que estão conectando todos os cidadãos da cidade. Os grupos, abertos a todos, optam por se engajar em diferentes questões e começam, pelo menos, a tentar melhorar as coisas para os seus cidadãos. Esta dissertação explorou a cidade como um organismo vivo. Procurou, identificou e analisou ações urbanas como entidades semelhantes a células, como possíveis catalisadores para a mudança urbana sustentável. Confiante de que a cidade está em um ponto de virada e que esses novos movimentos são capazes de criar um novo capítulo para a cidade e para cidades de diferentes lugares. 50 anos depois que Lefebvre compartilhou suas ideias sobre o direito à cidade, Curitiba pode oferecer algumas respostas.

O autor da dissertação não é brasileiro, mas viveu lá de 2014 até a conclusão deste trabalho, em março de 2018. Embora a dissertação seja escrita em inglês, todas as investigações foram realizadas em português. Por favor, permita que algumas palavras e ideias sejam perdidas na tradução e algumas opiniões compartilhadas pareçam estranhas, vindas de olhos gringos irlandeses. Para essa dissertação, o autor utilizou uma abordagem de Pesquisa-Ação Participativa (PAR: Participatory Action Research) inspirada nos princípios da Ecologia Social, buscando compreender o mundo e tentando modificá-lo, colaborativamente acompanhando a reflexão, e com o autor aprendendo, com grupos atualmente ativos dentro da RMC.

1.1 PROBLEMA DE PESQUISA

Em resposta às crises globais de hoje, quais processos organizados por grupos da Sociedade Civil que têm alguma forma de componente internacional, existem atualmente na RMC, os quais permitem o aumento da PC na construção de uma cidade mais sustentável. Tendo investigado as atuais teorias sobre o que constitui formas mais sustentáveis de urbanismo, qual é a realidade atual da cidade comemorada nos últimos anos como a “Capital Ecológica” do Brasil, quais são os principais problemas que a cidade enfrenta hoje, quais estratégias estão sendo empregadas para resolvê-los por grupos da sociedade civil e que oportunidades ou problemas existem para cidadãos normais participarem de processos de mudança urbana ecológica.

1.2 JUSTIFICAÇÃO

As crises atuais podem significar o fim da humanidade (CAPRA, 1996; KLEIN, 2014). Desde 2009, a maioria da humanidade é urbana e até 2050 espera-se que três quartos da população mundial vivam em cidades (ONU, 2009). As cidades são atualmente parte do problema, nosso desafio é entender como elas podem se tornar parte da solução. O desafio das últimas décadas foi criar Comunidades Sustentáveis (CAPRA, 1996), o que levou a amplos passos em direção à criação de cidades mais sustentáveis (ROGERS, 1995 & 1997; GIRARDET, 1999; NEWMAN, 1999; O MEARA, 1999; BROWN, 2005; LERNER, 2007).

Esses conceitos foram construídos nos anos mais recentes com a adição de novas perspectivas e conceitos, como Permacultura (HOLMGREN, 2002), Resiliência (WALKER ET AL. 2004; HOPKINS, 2009; NEWMAN, 2009), A Cidade Regenerativa (GIRARDET, 2014) e muito mais. Isso levou a chamada das Nações Unidas em 2015 para **Cidades inclusivas, seguras, resilientes e sustentáveis**, que posteriormente formaram a base da **Nova Agenda Urbana** e da **Habitat 3**.

Tentando entender a **Cidade como Solução**, o artigo também analisa o conceito de Ecocities (REGISTER, 1987; ROSELAND, 1997; MCDONOUGH, 2002; JOSS, 2009), incluindo recentes e problemáticos projetos de grande escala na Ásia (SZE, 2011; CAPROTTI, 2014, 2015; CUGURULLO, 2015, 2016), bem como a possibilidade de ampliar o processo de décadas da Rede Global de Ecovilas para

incluir redes de bairros ecológicos em cidades existentes e futuras para criar um futuro sistema de Ecocidades.

Enquanto Curitiba tem sido vista como líder na área do Urbanismo Sustentável nas últimas décadas (REGISTER 2001; BROWN, 2005; BARTH, 2014), existem críticas passadas e problemas atuais que a cidade deve abordar ou sanar:

- A campanha de marketing da cidade de 1990 como a “Capital Ecológica” brasileira, que não mencionou os problemas sociais e ecológicos do crescimento de favelas na periferia da cidade em rápido crescimento (MENDONÇA, 2002).
- Uma imagem construída da cidade que apagou outros discursos (MOURA, 2009).
- Problemas contínuos enfrentados pelas comunidades nos assentamentos informais da periferia, ocorrendo em áreas de alto risco ecologicamente sensíveis e vulneráveis, ao longo das margens dos rios das cidades (PEREIRA & SILVA, 2011) e conflitos ainda não resolvidos que a política pública não aborda adequadamente (FRÓES, 2017);
- Preocupações crescentes de segurança, com a cidade entrando pela primeira vez em 2014 na lista das 50 cidades mais violentas do mundo (CONSELHO DOS CIDADANOS DO MÉXICO PARA A SEGURANÇA PÚBLICA E A JUSTIÇA CRIMINAL, 2015).

Um crescente consenso surgiu entre a incompatibilidade entre o atual modelo econômico e os limites biológicos da vida no planeta Terra (CLUBE DE ROMA, 1972; BROWN, 1982; BRUNDTLAND REPORT, 1987; SHIVA, 88; JENSEN, 2006; KUMAR, 2009), com uma gama diversificada de soluções sendo oferecidas. Esta dissertação examina os argumentos que identificam o capitalismo como causa-raiz das Crises Globais hoje (BOOKCHIN, 1962; CAPRA, 2002; KLEIN, 2014; MASON, 2015) e clamam por Post, e / ou alternativas e caminhos anti-capitalistas, que também sugerem diferentes formas de melhorar estruturas de comunicação e processos para desenvolver alternativas ao sistema dominante de hoje (BOOKCHIN, 1987, CAPRA, 2002; HOPKINS, 2008).

De por que e o que, a como. Para consertar nossas cidades (*Fix our Cities*), a dissertação examina o leque de sugestões sobre como a PC pode atuar como o processo-chave para a transformação urbana, cujos aspectos têm sido explorados por diferentes autores (BOOKCHIN, 1987; ALBERT, 2003; HOPKINS, 2008; REVI, 2016), incluindo Direito à Cidade (LEFEBVRE, 1968; HARVEY, 2012), bem como formas muito recentes de organização política, como o Municipalismo Radical, (BOOKCHIN, 1987; HOPKINS, 2008; COLAU, 2016; SHEA BAIRD, 2015 & 2017 FINLEY, 2017) em algumas cidades espanholas.

1.3 OBJETIVOS

1.3.1 Objetivo Principal

Investigar ações recentes de grupos da sociedade civil atualmente atuantes na RMC que possuem alguma forma de componente internacional e que estão tentando construir uma cidade mais sustentável por meio da PC.

1.3.2 Objetivos Específicos

- a) Explorar as origens e desenvolvimentos recentes, tanto na teoria quanto na prática, sobre a ideia da Cidade Sustentável e os conceitos relacionados.
- b) Explorar as origens e desenvolvimentos recentes, tanto na teoria quanto na prática, em relação à PC, no sentido global.
- c) Explorar a recente história urbana relativa as cidades brasileiras, incluindo um resumo da situação atual e dos desafios enfrentados.
- d) Desenvolver uma visão geral do desenvolvimento urbano da RMC e delinear os desafios que a cidade enfrenta hoje, especialmente no que diz respeito à Sustentabilidade Urbana e à PC.

- e) Desenvolver e utilizar a abordagem da PAR, inspirada nos princípios da Ecologia Social, para participar e avaliar grupos ativos na cidade.
- f) Investigar as ações urbanas atuais dos grupos da Sociedade Civil em RMC, relacionadas à Sustentabilidade Urbana e / ou à PC, desenvolvendo um método de análise para avaliar os grupos atualmente ativos e suas ações.
- g) Selecionar e avaliar 3 grupos atualmente ativos, os quais receberam apoio internacional. Emitir questionário para cada grupo e avaliar o impacto das ações.
- h) Apresentar análises desses grupos e ações por meio de tabelas, mapas, imagens e relatórios escritos de entrevistas realizadas.

1.4 CONSIDERAÇÕES METODOLÓGICAS E ESTRUTURA DE DISSERTAÇÃO

A dissertação está estruturada em 3 capítulos principais. O primeiro capítulo começa com a introdução e apresenta o problema de pesquisa, justificção, objetivos principais e secundários e descreve a estrutura da dissertação.

O segundo capítulo é a Revisão de Literatura e está dividido em duas seções, a primeira referente à cidade e a segunda seção referente à PC. Este capítulo forma a área central da pesquisa e tenta fornecer um contexto para entender a complexa paisagem dos vários projetos mais tarde explorados, de modo a compreender de onde os diferentes projetos e movimentos estão vindo e tentando ir. A primeira seção deste capítulo, Cidade como a Solução, se relaciona com a sustentabilidade urbana e a cidade em geral, explorando criticamente as ideias atuais de como a cidade moderna pode responder aos desafios que a humanidade enfrenta atualmente. A segunda seção explora aspectos da PC na criação de comunidades urbanas sustentáveis. Ele explora uma ampla gama de aspectos teóricos, bem como lições práticas que podem ser aprendidas com os projetos municipais que estão acontecendo atualmente.

O terceiro capítulo diz respeito ao estudo de caso da dissertação e é dividido em 6 seções. Investiga as ações urbanas de grupos da sociedade civil que atuam em Curitiba nos últimos anos, cuja área de atuação inclui foco em Sustentabilidade

Urbana e PC. Primeiro, examina a história recente das cidades brasileiras e de Curitiba, dando uma breve visão geral do desenvolvimento urbano e delineando os desafios que a cidade enfrenta hoje. Em segundo lugar, após a exploração e participação de grupos de cidades, é oferecida uma visão geral das ações atuais de diferentes grupos na cidade, delineando exemplos de novos processos e ações que demonstram novas abordagens para a criação de uma cidade mais sustentável e identificando problemas que ainda precisa ser abordados. A partir disso, uma lista de pelo menos 25 grupos é criada para uma análise mais profunda. Em terceiro lugar, três grupos da lista anterior são explorados em maior detalhe, com um questionário dado a cada grupo, assim como os relatórios do autor sobre a participação contínua em várias ações com os diferentes grupos. Este capítulo termina com uma conclusão do Estudo de Caso, sempre considerando a discussão em andamento com os grupos pesquisados.

Os capítulos finais seguem de maneira típica, com os aspectos teóricos (capítulo 2) e as discussões desenvolvidas no Estudo de Caso (capítulo 3) desenvolvido em Considerações Finais, as quais são seguidos pelo cronograma, referências e apêndice.

1.5 REVISÃO DE LITERATURA

Este capítulo está dividido em duas seções: 1) Cidade como a Solução 2) PC. Ele explora uma gama de teorias, desenvolve argumentos em cada área e apresenta as conclusões combinadas no final do capítulo.

1.5.1 Cidade como a Solução

Em termos de que tipo de cidades a sociedade deveria tentar criar, este capítulo investiga as realidades urbanas atuais, os atuais projetos em andamento e a teoria sobre o que ainda é necessário. **A Idade Urbana** (2.1.1) define o contexto urbano contemporâneo. Investiga a mudança urbana em curso e a realidade de que um número cada vez maior de comunidades mais pobres se encontra nas cidades de hoje. As seções a seguir exploram o desenvolvimento da teoria e prática sobre soluções urbanas. **O desafio do século 21: Criar Comunidades Sustentáveis**

(2.1.2) examina o lento desdobramento do entendimento sobre a situação da humanidade, desde a identificação de um problema ecológico, para os chamados por Desenvolvimento Sustentável, até as Cidades Sustentáveis. **Além da Sustentabilidade para a Resiliência e Regeneração** (2.1.3) examina os apelos para ir além da sustentabilidade, olhando para resiliência, regeneração e fatores específicos para tais soluções urbanas, como a produção local de alimentos. **A questão das Ecocities** (2.1.4) examina um conceito ainda não totalmente definido que surgiu no último meio século. Ele investiga recentes desenvolvimentos negativos do conceito na Ásia e explora possíveis caminhos onde o projeto ainda pode ir, com base em movimentos ecológicos defendendo soluções urbanas com base no aumento da resiliência em todas as áreas.

1.5.2 Participação Cidadã

Esta seção explora aspectos da PC na criação de comunidades urbanas sustentáveis. As questões são exploradas principalmente em um sentido geral em cidades e comunidades do mundo, mas a parte final lida com eventos que estão acontecendo atualmente em uma cidade específica. Para começar, uma breve visão geral é dada do desenvolvimento de uma maior capacidade de os cidadãos se engajarem e participarem nos sistemas locais, de modo a afetar o mundo ao seu redor, principalmente falando que isso acontece em diferentes âmbitos da esfera política. **O nascimento da modernidade e um mundo cada vez mais participativo** (2.2.1) examina os principais momentos do “Nascimento da democracia” em Atenas, há 2.500 anos, até o “Nascimento da modernidade” nas ruas revolucionárias de Paris em 1789. Ele tenta desenvolver uma compreensão básica do complexo quadro sobre o qual os movimentos hoje são construídos; Aumento da igualdade para todos os sexos e raças, dinâmicas que deram origem ao capitalismo e as consequências, e o surgimento da era industrial que desencadeou as grandes mudanças ecológicas, para as quais estamos tentando encontrar soluções hoje. **Estruturas e Dinâmicas de Participação Cidadã** (2.2.2) está dividido em 2 partes. A seção Estruturas explora a teoria atual sobre o que a PC significa hoje, explorando diferentes estruturas e processos pelos quais os cidadãos podem moldar ativamente o mundo ao seu redor. Seguido pela seção “Dinâmica”, que examina com atenção os

problemas de menor escala, geralmente negligenciados, que podem ser vistos como a diferença real de porque alguns projetos e movimentos funcionam, enquanto outros não. Enquanto as seções anteriores lidam com as ideias de um modo mais geral, esta seção as analisa do ponto de vista do indivíduo, porque eles passam tanto tempo com um projeto ou movimento. **Respostas às Crises Globais de hoje** (2.2.3) examina as principais questões responsáveis por onde a humanidade se encontra hoje; possível colapso global, como resultado do atual sistema econômico e político que governa a humanidade hoje, o capitalismo global. A seção explora os defensores que argumentam que para a sobrevivência da humanidade, uma ruptura precisa ser feita a partir desse sistema e deve-se explorar caminhos alternativos que venham ser sugeridos, os quais só podem ser alcançados por uma maior participação dos cidadãos. As principais propostas feitas por Murray Bookchin são investigadas; Comunalismo, ecologia social e estruturas municipais para pequenas e grandes cidades. **O Direito à Cidade e as Revoltas Urbanas na Idade da Rede** (2.2.4) entra em maiores detalhes sobre o papel da cidade como o lugar ideal para a mudança social requerida. Ele também explora o papel crítico que a mudança tecnológica tem desempenhado, auxiliando na evolução desses movimentos e novas estratégias empregadas. **As Soluções Municipais e as Cidades Rebeldes** (2.2.5) examinam alguns dos experimentos municipais urbanos, mais excitantes, atualmente em andamento, os quais estão acontecendo na Espanha. Onde os cidadãos, em primeiro lugar, lutaram por uma maior participação nos assuntos da cidade, a Revolução Espanhola de 2011, e em segundo lugar, em 2015, ganhou o controle das instituições municipais de 8 cidades rebeldes. Esta seção analisa vários aspectos do que aconteceu e ainda está acontecendo na cidade de Barcelona, especialmente examinando questões de comunicação, para entender por que e como esse projeto é bem-sucedido. Explorando, o que seu chamado por uma revolução feminista democrata significa, a seção termina analisando como a cidade está inspirando projetos similares em mais cidades ao redor do mundo e ajudando a desenvolver uma rede municipal global, que inclui ativistas e cidades no Brasil.

1.5.3 Conclusões

A mudança urbana global está em andamento. Em 2050, 75% da população mundial será urbana. A população urbana do Brasil já é de 85%. As cidades são a linha de frente para lidar com as múltiplas crises que a humanidade enfrenta hoje, ações apropriadas são necessárias, rapidamente, para evitar a crise climática e construir resiliência para lidar com futuros choques. Evitar a destruição da humanidade repousa em nossa capacidade coletiva de consertar nossas cidades.

No mundo em desenvolvimento, a maioria das mudanças urbanas está acontecendo nas regiões periféricas das cidades, muitas vezes com questões de exclusão social, invisibilidade, falta de recursos, incluindo representação política, crime e insegurança. Essas regiões estão geralmente em áreas de alto risco, como margens de rios propensas a inundações e áreas ambientalmente protegidas. Quaisquer futuras soluções urbanas devem envolver e ser acessíveis a todos os cidadãos, permitindo a participação local na formação de políticas públicas, conforme proposto e esperado pelos movimentos Direito a Cidade, os ODS das Nações Unidas e a recente NUA.

O termo Cidades Sustentáveis está estabelecido há muito tempo, mas parece ter dificuldade em adotar novos conceitos com os quais as cidades devem lidar hoje, como resiliência, regeneração e muito mais. Com esclarecimentos detalhados, o termo ainda indefinido de Ecocidades poderia substituir o termo Cidades Sustentáveis, incorporando todos os conceitos atuais, juntamente com o que poderia vir no futuro, para encapsular o sonho utópico de que cidades poderiam ser. Reconhecendo que os recentes projetos de mega "Ecocity" na Ásia afetaram negativamente este conceito, a dissertação sugere que a frase deve ser recuperada. A dissertação nomeia estes projetos como projetos Ecocity falhos porque suas estratégias urbanas foram projetadas apenas para uma pequena porcentagem da população. Os projetos da Ecocity devem ser para todos os cidadãos e não para poucos. Eles devem lidar com a cidade inteira, com todos os desafios associados, e não apenas criar uma comunidade ou região fechada, isolada do sistema urbano mais amplo do qual faz parte.

Esta dissertação examina como a metodologia, a prática e a comunidade global do GEN poderiam formar a base para uma verdadeira rede global da Ecocity. GEN consiste em mais de 10.000 comunidades, incluindo dois distritos urbanos, com todos os continentes do planeta representados. A rede deles é a culminação de 20 anos de experiência de uma comunidade global diversificada. GEN deseja uma

aumento planetário, para onde “toda vila é uma ecovila, cada cidade uma cidade verde”, sem perder seus valores centrais de serem processos participativos de propriedade local. O desafio de hoje é entender como essa visão pode ser implementada globalmente nas grandes cidades atuais.

Em relação a quais estruturas e processos podem facilitar tal realidade; Esta dissertação sugere soluções Municipalistas, Confederalistas e Comunalistas. Da teoria desenvolvida por décadas pelos ativistas Murray Bookchin e Ecologia Social, às realidades vividas da sociedade anticapitalista e feminista curda que está sendo construída em Rojava no norte da Síria, devastada pela guerra, às experiências em evolução que estão acontecendo atualmente nas 8 "Cidades Rebeldes" de Espanha. Diversos projetos que afirmam estar construindo uma revolução feminista verdadeiramente democrática. Com estruturas de poder desafiadas e instituições cívicas abertas, permitindo, convidando e acomodando a Cidadania Ativa: A sociedade pode ser estruturada politicamente de uma forma fractal, com decisões indo do local para o global: das comunidades nas ruas, aos bairros, região, cidade, bioregião. Com base nas estruturas existentes da GEN, uma rede da Ecocity consistiria de comunidades dentro das comunidades; uma confederação de bairros ecológicos aglomerados, comunicando-se entre si de forma não hierárquica, organizando-se horizontalmente e verticalmente através de assembleias locais. Qualquer nó dentro da estrutura é local e global em todos os momentos, com atenção dedicada a dinâmicas de participação para garantir que a igualdade seja primordial. Desta forma, todos os cidadãos co-criam as cidades do futuro, de baixo para cima; o planejamento da cidade se torna um processo de facilitação comunitário.

Para obter a parte ecológica correta em nossas comunidades e no nosso planeta, precisamos também acertar a parte econômica, já que ambas estão intrinsecamente conectadas. Qualquer sistema econômico ecológico deve viver dentro dos limites da vida na terra, isso significa romper com o atual modelo econômico de crescimento sem fim. Esta dissertação sugere que o sistema atual do capitalismo global sob a forma atual do neoliberalismo não é compatível com tal sistema sustentável; Portanto, é necessária uma ruptura do capitalismo. A base da transição está centrada na reconstrução de nossas relações com energia, acima de tudo; petróleo. Enquanto muitas formas de alternativas existem, esta dissertação vê o modelo de cidades futuras como parte de uma solução pós-capitalista para o

planeta. Ele sugere caminhos baseados nas respostas criativas decrescentes aos desafios gêmeos do aquecimento global e do pico petrolífero que estão sendo desenvolvidos por vários grupos ao redor do planeta hoje, inspirados pelo PC e filosofias relacionadas, incluindo GEN, *Transition Towns*, *GAIA education*, *Degrowth* e Agroecologia.

A PC é a chave para alcançar esses objetivos, construindo soluções locais acessíveis baseadas em valores econômicos, educacionais, políticos e culturais compartilhados. O desafio é multiplicar as soluções existentes e conectar as comunidades. Assim, tornando as cidades mais verdes, consertando nossas cidades, fixando nosso planeta: A sobrevivência da humanidade.

1.6 ESTUDO DE CASO

Este capítulo diz respeito ao Estudo de Caso da dissertação e é dividido em 6 seções. Começa por investigar o desenvolvimento urbano do Brasil, incluindo um estudo mais detalhado da evolução urbana de Curitiba e a identificação dos desafios atuais enfrentados. A área principal examina as ações urbanas recentes dos grupos da sociedade civil que atuam na RMC, cuja área de atuação inclui o foco na Sustentabilidade Urbana e na PC. **Metodologia** (3.1) descreve os passos pelos quais a investigação é realizada. **O Contexto Urbano das Cidades Brasileiras** (3.2) apresenta um resumo do desenvolvimento urbano brasileiro e descreve os desafios atuais enfrentados em relação à Sustentabilidade Urbana e à PC, incluindo uma subseção referente a temas semelhantes para a cidade de Curitiba. **Respostas Locais De Curitiba** (3.3) explora o desenvolvimento das respostas, dos últimos anos, dos Movimentos Cidadãos em Curitiba, para criar uma cidade mais sustentável. Esta seção é dividida em várias subseções para explorar vários aspectos deste tópico, incluindo uma análise geral de 30 grupos selecionados. A partir destes, são investigados 3 grupos selecionados com maior detalhe, os quais recebem ou receberam alguma forma de apoio internacional: **Estudos de Caso: 3 Grupos atualmente ativos em Curitiba** (3.4), com uma subseção para cada grupo. **Resultados e Análise de Dados** (3.5) explora as respostas de questionários compartilhados com cada um dos 3 grupos. Os dados são compartilhados na forma de tabelas, mapas, imagens e textos escrito da dinâmica durante o PAR, processo

de investigação. Finalmente, há uma seção de **Conclusões** (3.6) para apresentar um resumo de todas as questões abordadas neste capítulo e as conclusões alcançadas após a análise das respostas dos 3 grupos selecionados.

1.6.1 Metodologia

Na seção Estudo de Caso, o processo de pesquisa é qualitativo, com o autor atuando como um participante ativo, aprendendo de, com e por movimentos e grupos, sempre que possível. O autor está utilizando uma abordagem de PAR inspirada nos princípios da Ecologia Social, buscando compreender o mundo, tentando modificá-lo colaborativamente e acompanhando reflexões, tendo o autor aprendendo sobre, com e de grupos atualmente ativos na RMC.

Para o estudo existem dois níveis de análise. Primeiramente, é apresentado um resumo do desenvolvimento urbano brasileiro, baseado principalmente na leitura de textos contemporâneos, os quais incluem uma breve história das cidades brasileiras e definem os desafios atualmente enfrentados. Esta seção inclui uma visão geral do desenvolvimento urbano da RMC, delineando os desafios que a cidade enfrenta hoje, no que diz respeito à Sustentabilidade Urbana e à PC, sempre que possível. Observações pessoais também estão incluídas.

Em segundo lugar, a metodologia de estudo utilizada é a observação participativa com grupos focais, o que é uma ferramenta que ajuda a recuperar informações importantes por tomadores de decisão e pelas partes interessadas. Um exame é feito sobre as ações urbanas recentes e atuais na RMC, as quais tentam criar uma cidade mais sustentável através da PC. Esta seção, posteriormente, é dividida em duas seções distintas:

- A. Visão geral: Identificar ações recentes na cidade, para entender o que está sendo experimentado, por quem, onde e por que, nas relações com grupos da sociedade civil que tentam fazer mudanças. Esta análise é usada para apresentar uma visão básica inicial da situação atual na RMC. A partir desta análise, uma seleção é feita de um mínimo de 25 grupos (25+) atualmente ativos na cidade, para examinar cada um com mais profundidade, como uma entidade individual e também examinando as relações entre grupos, como

eles interagem entre si e com outras entidades. Estabelecer se eles estão recebendo, ou já receberam apoio internacional para suas iniciativas locais. Se sim, em que forma. Será apresentada uma análise aprofundada da situação atual com base nas experiências do trabalho do autor com alguns grupos e de entrevistas realizadas com alguns dos principais atores, conforme delineado pelo PAR, usando tabelas, mapas, imagens e relatórios escritos.

- B. 3 grupos da lista de 25+ serão selecionados para uma investigação mais aprofundada. Todos os quais estão recebendo ou receberam recentemente alguma forma de apoio internacional ou estrangeira. Tendo sido já analisado inicialmente no passo 1, eles receberão um questionário e o autor participará em mais momentos com as suas ações e realizará entrevistas faladas com diferentes participantes de comunidades distintas, sempre que possível (Equipa central, voluntários, participantes em ações urbanas, comunidades afetadas pelas ações urbanas). Os resultados serão compartilhados usando tabelas, mapas, imagens, relatórios da participação do autor em ações e relatórios escritos das entrevistas realizadas com alguns dos principais atores.

Grupos que possuem alguma forma de conexão ou suporte internacional, significam:

- A) Eles estão atualmente recebendo ou receberam investimento financeiro, apoio de recursos, ou pessoas que auxiliam em ações locais de Curitiba por um período.
- B) Eles são um grupo local de um organismo internacional.
- C) Facilitam programas localmente desenvolvidos fora do Brasil.
- D) Outros, os quais eles definem, que atendem a satisfação de autores e coordenadores.

A lista de 25+ grupos ativos na RMC explorados pelo autor é a seguinte lista (TABELA 11). O autor teve algum contato com alguns grupos antes do início da dissertação, mas a maioria foi investigada entre março de 2016 e março de 2018.

LISTA DE 25+, GRUPOS ATIVOS EM CURITIBA RMC

#	NAME OF GROUP (TRANSLATION)
1	350 Brasil
2	A Rede Social Brasileira por Cidades Justas e Sustentáveis (Brazilian Social Network for Sustainable and Fair Cities)
3	Bicicletaria Cultural (The cultural bikestore)
4	CASLA (Casa America Latino / Latin American House)
5	Centro Cultural Humaita (Humaita Cultural Centre)
6	Cicloiguaçu (Associação de Ciclistas do Alto Iguaçu)
7	Circo de Democracia (The Democracy Circus)
8	Code For Curitiba
9	Coletivo Mão na Terra (Hand in the Earth collective)
10	COURB (Collaborative Urbanism)
11	Curitiba em Transição (Transition Towns Curitiba)
12	Curitiba Lixo Zero (Zero Waste Curitiba)
13	Dona Clara Occupation
14	Garibaldis & Sacis
15	Horta Comunitária de Calçada Cristo Rei (The sidewalk community garden of Cristo Rei neighbourhood)
16	Instituto Nhandecy
17	Jardim das Amoras Brancas (The Garden of the white berries)
18	Laboratório de Cultura Digital (Laboratory of Digital Culture)
19	Movimento Nossa Curitiba (Our Curitiba movement)
20	MST (Movimento dos Trabalhadores Sem Terra - Landless Workers' Movement)
21	Nacion Pachamama (Nation Pachamama, Mother Earth)
22	OCEL (Ocupação Cultural Espaço da Liberdade - Cultural Occupation Space of Freedom)
23	Parque Gomm (Gomm Park)
24	PCS (Programa Cidades Sustentáveis) - Sustainable Cities Programme
25	Peacelabs (Previously Cheer For Peace)
26	Praça de bolso do ciclista (Cyclists pocket park)
27	Sociedade Global (Global Society)
28	TETO (Roof)
29	Vagas Vivas (Live parks – ex car park spaces)
30	WRI Brasil Cidades Sustentáveis (World Resources Institute Brazil – Sustainable Cities)

Ao avaliar as ações dos grupos, o autor foi inspirado na **4-D Whole Systems Design Framework** (4D) conforme delineado pelo grupo GAIA Educação, o qual se origina de ideias desenvolvidas pela GEN. Esta técnica oferece uma análise útil sobre a construção de comunidades sustentáveis. GEN e GAIA delineiam 4 “pilares fundamentais da sustentabilidade”, os quais são: Social, Econômico, Ecológico e Visão de Mundo. A partir disto, o autor tentou se engajar com grupos, avaliar suas ações, estrutura e filosofia, bem como seus níveis de inclusão, permitindo que o autor, um cidadão normal, se engajasse e participasse. O autor avaliou os aspectos de cada grupo nos critérios descritos abaixo (TABELA 12), com cada pilar dividido em algumas áreas-chave. Os resultados subjetivos do autor são compartilhados posteriormente.

AVALIAÇÃO DOS GRUPOS LOCAIS EM CURITIBA

PILLAR	CHARACTERISTICS
Social	6 fatores: 1) O grupo examina os problemas sociais na RMC de Curitiba e oferece soluções, em teoria. 2) As ações do grupo acontecem em áreas com problemas sociais, tentando envolver as comunidades locais em ações para a mudança desejada. 3) Facilitar a participação, qual é o seu nível de abertura no que diz respeito a permitir a participação normal dos cidadãos, isso inclui a acessibilidade econômica. 4) Participação em Grupo: O quão abertos eles estão em permitir que novos participantes se envolvam ativamente em áreas centrais de tomada de decisão e criação de novos projetos, eles têm um procedimento para isso. 5) Colaboração com outros grupos e entidades atualmente ativos na cidade. Podem ser eles que participam de ações de outros grupos, ou melhor, quando iniciam ações ou ações conjuntas com outros grupos. Eles apoiam outros grupos e atividades? Se sim, como? (6) Quão bem e a cola (como delineada por Albert) de seu trabalho de movimento, é pegajosa, é social. Há celebrações, momentos profundos e experiências.
Econômico	4 fatores: 1) Participação econômica. As pessoas têm que pagar para participar de ações. Se não, eles praticam para ajudar aqueles em dificuldade. As pessoas pagam para se juntar oficialmente ao grupo. Os membros principais recebem uma forma de pagamento por "trabalho" feito para o grupo. Algumas pessoas apenas sobrevivem financeiramente do "salário" trabalhando com o grupo. 2) Sustentando projetos. Em termos de sustentar seu projeto, como eles estão fazendo atualmente? Os membros lutam para participar ou as pessoas participam do tempo livre? Eles têm apoio financeiro de fora do país, em caso afirmativo, quais fatores devem ser atendidos para continuar recebendo financiamento? 3) Economia Ecológica: Eles buscam soluções ecológicas radicais, eles defendem soluções anti ou pós-capitalistas? Eles usam formas alternativas de apoio econômico dentro de seu grupo ou com outros grupos? Eles estão abertos para encorajar ou apoiar sistemas como o intercâmbio. Eles podem apoiar as pessoas a encontrar emprego em áreas de interesse. Suas ações se concentram nesses problemas. 4) Onde estão as ações deles, quem é a comunidade alvo deles? Eles se envolvem com todos os sectores da sociedade ou com grupos técnicos fechados?
Ecológico	4 fatores: 1) Resposta individual do grupo às crises. Até que ponto suas ações criaram impacto real na RMC e nas diversas comunidades. 2) Eles implementaram mudanças reais no reino urbano, em relação à sustentabilidade urbana. 3) Sua filosofia está se expandindo para públicos mais amplos, são projetos similares acontecendo? 4) Quão plenamente suas ações respondem aos tópicos abordados na investigação da dissertação
Visão do Mundo	4 fatores: 1) Suas ações estão mudando atitudes em alguns sectores de Curitiba / mentalidades brasileiras. 2) Seu movimento está lutando contra algo, ou estão construindo soluções práticas que estão tentando implementar? 3) Eles têm um componente político, eles se engajam na discussão pública sobre seus problemas? 4) Quão eficaz é a sua capacidade de comunicação, em comunicações externas e dinâmica interna de grupo também

3 grupos da lista de 25+ foram selecionados para uma investigação aprofundada por causa do importante trabalho que estão fazendo, o que é visto como mais relevante para o foco dessa dissertação. Todos eles também cumprem os seguintes critérios: 1) Eles estão atualmente ativos na RMC 2) Seu trabalho se concentra na sustentabilidade urbana 3) Eles facilitam a PC 4) Eles têm, ou tiveram, uma conexão internacional.

Os 3 grupos da lista de 25+ selecionados são:

1. Cicloiguaçu
2. Instituto Nhandecy
3. TETO

Cada grupo foi solicitado a responder ao seguinte questionário (TABELA 13):

#	PERGUNTA
1	Descreva suas ações na RMC
2	Quais são as suas conexões com as instituições internacionais, ou de que forma você, no passado, ou agora, recebe apoio internacional para suas ações locais?
3	Existem alguns fatores ou diretrizes das instituições internacionais às quais o seu grupo deve aderir para receber esse apoio internacional? Se sim, por favor, nos conte.
4	Você observou algum problema surgido entre os fatores que seu grupo deve aderir, para receber apoio internacional e demandas da comunidade local?
5	Em relação à dimensão da ação, onde estão exatamente suas ações, nos municípios da RMC ou nas comunidades?
6	É possível fazer o que você faz sem qualquer forma de interação do governo estadual ou municipal?
7	Você conhece outros grupos que agem de forma semelhante, em outras partes do Brasil ou do exterior? Eles estão sob as mesmas diretrizes? Eles enfrentam problemas semelhantes?
8	Quanto ao financiamento do seu projeto, os participantes precisam pagar para participar. Os membros atuais do grupo recebem pagamento pelo seu trabalho ou eles oferecem seu tempo livremente? Se o público tiver problemas financeiros para pagar por eventos, ações, programas, você tem algum tipo de programa de assistência financeira?
9	Em relação aos níveis aumentados de participação com o seu grupo, você tem estruturas para permitir que os recém-chegados assumam rapidamente funções ou realizem tarefas? Os participantes mais novos participam dos principais processos de tomada de decisão?
10	Quais são as chances de você abrir suas ações para outras áreas na RMC ou no Brasil?

Os resultados são compartilhados por meio de tabelas, mapas, imagens, relatórios de autor da participação em ações e relatórios escritos de entrevistas realizadas com atores.

1.6.2 Respostas locais de Curitiba

Esta seção explora o desenvolvimento de respostas dos Movimentos Cidadãos para tornar Curitiba mais sustentável nos últimos anos. A dissertação explora a cidade como um organismo vivo, procurando, identificando e analisando ações urbanas como entidades semelhantes a células, como possíveis catalisadores para a mudança urbana sustentável. Essas ações podem ser momentos, processos, projetos, erupções ou mudanças construídas no meio urbano. Aqui, as reflexões de Capra sobre o pensamento sistemática e a complexidade são lembradas, em

relação à Teoria das estruturas dissipativas: “Esse surgimento espontâneo da ordem em pontos críticos de instabilidade, que é muitas vezes referido simplesmente como “emergência”, é uma das marcas da vida. Isto foi reconhecido como a origem dinâmica do desenvolvimento, aprendizado e evolução” (CAPRA, 2007, p. 476). Vendo que “o foco agora está mudando da estrutura para os processos de sua emergência” significa que, em vez de simplesmente analisar a forma arquitetônica de, digamos, um jardim comunitário urbano, procuramos investigá-lo como um processo; quais dinâmicas deram origem à sua formação, quem a sustenta, como e por que, além de explorar o que ele poderia se tornar. Lembrando, também, que tal ação, pode levar a ações urbanas semelhantes desenvolvendo-se de maneira rizomática na cidade, como explorado anteriormente.

Como dito anteriormente, para esta dissertação o autor utilizou uma abordagem PAR inspirada nos princípios da Ecologia Social, buscando compreender o mundo e tentando modificá-lo colaborativamente, tendo o autor acompanhado a reflexão e aprendido, com e de grupos atualmente ativos na RMC. A partir de agora, o autor compartilha visões expressas através do diálogo com pessoas envolvidas em ações.

A análise aqui explorada procura entender os fatores de quem está fazendo o quê, onde, por que, com quem e como. A análise examina as ações dos grupos listados no grupo 25+, bem como a natureza desses grupos, que o autor examina usando os quatro critérios descritos anteriormente (TABELA 2). Os três grupos examinados posteriormente também estão incluídos nesta seção, mas análises específicas sobre eles e suas ações são deixadas para futura seção específica. Esta seção não se limita ao grupo de 25+, mas reflete uma dinâmica mais ampla dos atores nessa área. O autor definiu três subseções distintas para explorar: 1) 2007 e novas formas de movimentos de ação direta. 2) Ações recentes para fazer uma Curitiba mais verde. 3) Conectando Comunidades: Ações Urbanas como Catalisadores para Mudança. A seção de conclusões envolve o gráfico do autor (TABELA 16) baseado na análise do grupo de 25+ sobre os critérios definidos anteriormente.

1.6.2.1 Conclusões

Com base nos diferentes níveis de participação com os grupos discutidos acima, que estiveram envolvidos na criação de ações urbanas para criar uma Curitiba mais sustentável, levando em conta os 4 critérios descritos anteriormente (TABELA 13), o autor compartilha aqui: Respostas de Curitiba. As ações aconteceram na cidade de Curitiba, que é um território não limitado ao município de Curitiba, conforme delineado no mapa de ações registradas de diversos grupos. Conclusões estão abaixo:

As diferentes comunidades que trabalham para criar uma cidade sustentável por meio da PC são grandes e diversificadas, com diferentes abordagens para tentar criar mudanças, vendo diferentes fatores de sucesso. Em última análise, a capacidade de implementar a mudança urbana para uma cidade mais sustentável é uma questão política. Portanto, um desafio identificado foi a capacidade de movimentos e projetos em construir uma cultura em torno de questões urbanas sustentáveis que incluía um componente político. Desde os novos movimentos focados em ações diretas em 2007, Curitiba começou a ser transformada por meio de SMs baseados em ecologia radical, PC, inclusividade e um vibrante movimento cultural para efetuar mudanças políticas na paisagem urbana. Com o crescimento de mais hortas comunitárias e projetos semelhantes em pequena escala, novas redes de cidadãos estão se formando no âmbito público, facilitando um meio de envolvimento cara a cara, muito necessário, que promove a confiança. Algumas das SMs inicialmente confrontadas reconheceram que eram necessárias estruturas mais formais para realizar os objetivos das diversas comunidades. Um risco, em relação a isto, é perder a flexibilidade e a abertura dos grupos. Os movimentos de bicicleta e ecologia urbana avançaram muito nos últimos anos e a eleição de Goura em 2016 foi um verdadeiro marco para essas SMs; a partir da ocupação das ruas para ocupar as instituições municipais. Desde que assumiu o cargo, as várias SMs de que Goura faz parte e ainda apoia, agora têm acesso à infraestrutura da cidade para influenciar ainda mais o público sobre questões urbanas sustentáveis. A co-criação de políticas, através dos processos abertos dos vários GTs, é típica das estratégias municipalistas e isso poderia evoluir ainda mais para maiores mudanças.

O que tem sido marcante e muito positivo em Curitiba, tem sido o uso de grupos e movimentos culturais e artísticos para avançar ainda mais essas SMs ecológicas, especialmente com os grupos associados à ABM (Arte Bicicleta

Mobilidade. festival). Desde o início, esses grupos desenvolveram formas de resiliência, porque eles pediram e sobreviveram apenas devido à PC. Mais tarde, a prefeitura os apoiou, por algumas às vezes, mas eles ainda possuem essa atitude DIY (Do It Yourself). Os projetos descritos na seção **Greening the city** (3.3.2) compartilham este aspecto. Ambas as estruturas organizacionais e seus espaços físicos estão abertos a qualquer um que deseje se engajar. Na maioria dos casos, também é livre a participação. Isto permite que todas as pessoas se envolvam, independentemente da posição social ou econômica. Quando esses projetos acontecem no âmbito público, os mesmos possuem dimensões extras. As pessoas podem ser atacadas e os projetos podem ser destruídos ou ter coisas roubadas. No Brasil já tem altos níveis de violência, os quais continuam aumentando devido à crise econômica, fator este que pode ser determinante para algumas pessoas, pois sentem que o risco de participar de um projeto é muito alto. Outros projetos e ações avaliadas, como algumas das Cidades Inteligentes (*Smart Cities*) e Empresas Sociais, apareceram em ambientes seguros, fechados e mais controlados. Outro aspecto da PC é o dos níveis para os quais os participantes mais novos podem chegar, em termos de entrar rapidamente no grupo principal, onde a tomada de decisões pode acontecer. Aqui as estruturas definidas dos diferentes grupos podem afetar seu sucesso, onde as pessoas podem chegar ao participar das ações de um grupo, das quais elas podem se beneficiar, mas apesar do desejo de interagir mais profundamente, o grupo não pode ou não permitir tal imersão. Em alguns casos, em Curitiba, parece que as pessoas são consumidoras de eventos ecológicos, ao invés de participarem dos mesmos, incluindo muitas vezes altos pagamentos para fazerem um programa ou workshop.

A conectividade entre os grupos é importante. Nos movimentos de jardinagem, o Parque Gomm pode ser visto como um catalisador, a partir do qual nasceram novos projetos. Essa capacidade de se multiplicar é muito poderosa, a aparência rizomática de novos nós também depende dos níveis de abertura. Além disto, com a expansão do movimento, os fatores geográficos se tornam mais aparentes. Enquanto muitas pessoas envolvidas com Gomm não moravam perto, mas vinham e apoiavam o projeto por razões culturais e sociais, os projetos mais novos estão sendo criados por pessoas que moram em suas vizinhanças. Isto dá uma maior vibração ao projeto, levando ao aumento da conectividade e ao desenvolvimento da comunidade, bem como à expansão dos limites do projeto, por

exemplo, a rua Cristo Rei, que as vezes torna-se uma zona de recreação infantil e cinema ao ar livre. Anteriormente, um ponto negativo parecia ser a falta de conectividade entre muitos projetos. A FUSA (Frente Unificada Socioambiental Curitiba) demonstrou que, apesar da união de alguns dos SMs mais fortes ou mais antigos e ONGs ambientais, havia muitas diferenças entre os atores para construir dinâmicas de mudança. Essa incapacidade de trabalhar em conjunto em uma frente única, ou para uma demanda específica, é um problema que pode ser resolvido, mas é necessário mais trabalho. O trabalho da ONG Sociedade Global tem sido muito importante nesse sentido, desenvolvendo metodologias e reunindo muitos grupos para realmente diversificar as conversas, o que levou a importantes novos *insights* sobre problemas e soluções. O festival Ecocity também abordou esse problema e tentou reunir grupos divergentes, para além de compartilhar ideias, tentar co-criar o processo. Outro fator que o festival Ecocity abordou foi a localização das ações: estavam acontecendo nos locais estabelecidamente seguros e centrais, e muitas vezes apenas frequentados por certos tipos de cidadãos de Curitiba, ou houve tentativas de “Sair do Gueto ativista” para se conectar com as comunidades em seus territórios nas áreas periféricas da cidade. No momento da escrita, as ações mais recentes na cidade descritas foram as da comunidade Parolin com os Coletivos em Movimento, o que mostra outro importante avanço para os SMs. Ambos devido à localização, em uma favela do centro da cidade, mas também a estrutura, não apenas 1 ONG, mas pelo menos 15 grupos diferentes, se unindo com a comunidade para criar um processo que é impulsionado e baseado na mesma. Isso é muito importante de duas maneiras: em primeiro lugar, a ação não é apenas uma ONG que entra por um dia e sai, eles vêm para estabelecer um relacionamento contínuo com a comunidade. Em segundo lugar, para os grupos participantes, os ativistas podem ser movidos vendo as realidades sociais das comunidades marginalizadas. Se mais dessas interações podem acontecer, isto só pode ser uma coisa boa e ajudará mais amplamente a mudar atitudes culturais fortes no Brasil.

Em relação à análise do grupo de 30, os 4 critérios para análise de cada um foram explorados anteriormente. Esta é apenas uma ferramenta para ter uma noção de onde o autor sente que cada grupo está, em relação aos 4 critérios. O objetivo era auxiliar na avaliação, não na criação de um ranking de quem é o melhor. Diferentes grupos têm diferentes focos, então eles irão pontuar de forma diferente. A partir desta análise, examinaremos agora 3 desses grupos mais detalhadamente.

1.6.3 Estudos de Caso: 3 grupos atualmente ativos em Curitiba

Três grupos avaliados na última seção, na lista de 25+, são examinados aqui com mais detalhes. Eles foram selecionados porque suas ações urbanas são vistas como mais relevantes para as áreas já exploradas nesta dissertação. Todos eles cumprem os seguintes critérios: 1) Eles estão atualmente ativos na RMC 2) O trabalho deles se concentra na sustentabilidade urbana 3) Eles facilitam a PC 4) Eles têm uma conexão internacional. Os 3 grupos são: 1. Cicloiguaçu 2. Instituto Nhandecy 3. TETO

Esta seção (3.4) fornece uma análise detalhada sobre cada grupo, incluindo sua história e objetivos. Algumas das principais ações urbanas dos grupos serão selecionadas para análise, sendo que o suporte fotográfico será oferecido para ajudar a dar uma noção mais completa do contexto.

A seção seguinte (3.5) analisa dados e respostas de um questionário emitido para cada grupo. Ela também contém uma seção baseada em insights do autor, os quais ocorreram durante o uso da abordagem PAR, do tempo que o mesmo passou com cada grupo.

Os resultados serão compartilhados usando tabelas, mapas, imagens, relatórios PAR do autor da participação em ações e entrevistas com atores-chave.

1.7 RESULTADOS E ANÁLISE DE DADOS

Vamos agora explorar os 3 grupos em mais detalhes. Os dados são compartilhados na forma de tabelas, mapas, imagens e texto escrito da dinâmica durante o processo de investigação PAR.

Esta seção apresenta resultados e análise de dados a partir dos questionários e de suas ações. Mapas detalhados são preparados para cada grupo e um mapa conjunto compara as diferenças geográficas entre as ações de cada grupo. Com base no sistema 4S, no conteúdo das respostas ao questionário, mapas e discussões subsequentes com os atores do grupo, um gráfico compara os atributos de cada grupo em cada uma das 4 áreas.

A seção posterior tem um relatório PAR para cada grupo, com base nas experiências de participação do autor e do tempo gasto com o grupo.

1.7.1 Resultados de questionários

CICLOIGUAÇU: RESPOSTA AO QUESTIONÁRIO

#	REPOSTA
1	fazemos parte da sociedade organizada de usuários da bicicleta que promove , pesquisa e dialoga com poder publico para garantir segurança e equidade entres os modais de transporte. Nossa atuação se dá nos municipios Do Alto da bacia do Rio Iguaçu, somos a Cicloiguaçu - associação de ciclistas do alto iguaçu.
2	promovemos o fórum mundial da bicicleta em 2014, recebemos intercambistas dinamarqueses , participamos do termo de entendimento entre Curitiba e a universidade holandesa de twente.
3	ainda nao coseguimos fomento de fontes internacionais
4	necessário atores da associação que busquem estes suportes.
5	já dialogamos com a prefeitura de Pinhais e São Jose dos Pinhais. necessário mais braços para continuar o trabalho nestes campos. existem embaixadores nestas regioes que ainda nao foram alinhados.
6	Necessario lutarmos pela criação de politicas de estado que nao findem no mandato dos cargos legislativos. Com poucos braços na associação, o trabalho no campo dos tomadores de decisão concentra esforços nas macro politicas, - apesar de muito pouco ser executado.
7	conhecemos grupos nacionais e latino americanos. com formatos semelhantes e diversos. na maioria enfrentam o mesmo vai e vem das das vontades dos governantes e as mesma necessidade de provar as obviedades.
8	somos uma associacao formalizada que possui um gasto mensal abrimos possibilidade de associados e doadores, ainda levantamos rifas e rentabilizamos atraves de servicos. queremos migrar para OCIP.
9	possuimos uma estrutura formal, com grupos de trabalho, reunioes presenciais, e necessidade de voluntarios para execussao de projetos de campo e assessoria interna. frequentemente fazemos chamamento para a engrossar voluntariado.
10	grandes chances, necessario fomentar outros grupos a se organizarem e criarem ações em rede

INSTITUTO NHADENCY RESPOSTA AO QUESTIONÁRIO

#	REPOSTA
1	<p>O Gaia Education ou Programa de Educação Gaia é a pedra fundamental do Instituto Nhandecy. Foi a partir da experiência da primeira edição realizada no Paraná que sentimos a necessidade de "um lugar" onde pudéssemos praticar a visão de sustentabilidade vinda a partir do Gaia. Então, em setembro de 2011, foi fundado o Instituto Nhandecy. Desde então, já realizamos 4 edições do Programa, envolvendo diretamente mais de 100 participantes e mais de 30 facilitadores. Em 2018, estão sendo co-criadas mais duas edições, uma no Paraná - com início em fevereiro -, e outra no Rio Grande do Sul, a partir de abril.</p> <p>Como espaço de prática, o Instituto Nhandecy oferece práticas ancoradas nas 4 dimensões do Programa de Educação Gaia, que são:</p> <p>DIMENSÃO SOCIAL</p> <p>Comunicação Não Violenta (CNV); Dragon Dreaming; Dança Circular; Círculos de Construção de Paz e Transformação de Conflitos; Conversas Significativas; Coletivo "Com as mãos "</p> <p>DIMENSÃO ECOLÓGICA</p> <p>Campanha de Libertação das Sementes (Seed Freedom Campaign); Jardins Comestíveis; Hortas comunitárias; Segurança Alimentar; Consumo Consciente;</p>

	<p>Oficina de compostagem doméstica; DIMENSÃO ECONÔMICA Circuito Econômico Solidário (junho um ano de implementação do 1o Circuito no Brasil); Feiras de Trocas; Moeda Social; DIMENSÃO VISÃO DE MUNDO Programa de Educação Gaia Círculo de Mulheres; Danças da Paz Universal; Kuaracy Korá - sistema de auto-conhecimento da tradição tupy; PDC (Curso de Design em Permacultura urbana); Essa divisão de nossas atividades por dimensão é uma forma pedagógica de tornar compreensível qual o principal aspecto que esta prática movimenta, porém, ela não é segregada das outras. Na nossa visão de mundo, tudo é e está interdependente e conectado. A frequência dos encontros e disponibilidade de cada vivência varia de acordo com a atividade.</p>
2	<p>Nossa principal parceria internacional é com o Gaia Internacional, para a certificação do Programa Gaia Education. https://gaiaeducation.org/face-to-face/ede-programmes/ Neste processo, pagamos uma taxa de certificação e recebemos apoio na divulgação internacional. Pelo convenio que o Gaia Education possui com a UNESCO, reconhecido como uma das iniciativas mais importantes para a educação para a sustentabilidade, os programas certificados podem obter certificação da UNESCO também. No caso da Campanha de Libertação de Sementes, somos signatários do pacto internacional pelo http://seedfreedom.info/ O curso de "Círculos de Construção de Pazes e Transformação de Conflitos" é elaborado em parceria com o Instituto Paz&Mente e tem apoio da Cátedra da UNESCO para estudos de paz. http://www.pazemente.com.br/ Nos cursos de formação de Circuitos Econômicos Solidários, temos parceria com a CEAAL (http://www.ceaal.org/), Dinamismo Juvenil (http://www.dinamismojuvenil.org.mx/), Comercio Justo México (http://www.comerciojusto.com.mx), o Instituto de Estudios Superiores para la Paz y el Desarrollo do México (http://pazenlinea.com/), a DVV International (https://www.dvv-international.de/), a Rede SOLIDARIUS (http://www.solidarius.com.br/).</p>
3	<p>No caso do Gaia Education, temos um protocolo a ser preenchido para obter a certificação dos Programas de Educação que queremos realizar. Neste link você pode visualizar as diretrizes. https://gaiaeducation.org/face-to-face/ede-programmes/certification/</p>
4	<p>A principal questão é que nem sempre o que eles pedem nós podemos dar (de informações) e alguns termos de comprometimento que temos que assinar que não são/foram construídos conosco, apenas são protocolos que vem de lá e temos que acatar sem abertura para conversa/recombinar.</p>
5	<p>O Instituto Nhandecy foi fundado em Curitiba e tem como perfil o chamado para a prática de atividades em sua sede. Essa postura faz com que fortaleçamos nossa visão de mundo e o reconhecimento na cidade e além dela. Temos recebido convites para realizar cursos/vivências em diversas cidades do PR e do Brasil. Como exemplo, para o ano de 2018, temos o chamado para grupo de prática de CNV em Morretes/PR, PDC em Cascavel, Gaia Education no Rio Grande do Sul, e o projeto no Céu de Mapiá/AM. Em 2017, foi realizado um Dragon Dreaming em Foz do Iguaçu e em Lajeado/RS.</p>
6	Sim.
7	<p>Não conhecemos. As instituições que conhecemos trabalham com práticas "isoladas" /monotemáticas. Não conhecemos outra instituição que tem a diversidade de práticas que nós.</p>
8	<p>Trabalhamos com diversas formas de trocas financeiras, pois eles são a única fonte de financiamento que temos para nossas ações. Um dos principais pilares para construir comunidade é abraçar a diversidade. Seguindo este princípio, acolhemos as necessidades e ofertas dos nossos associados (membros) e das pessoas que vem praticar conosco (participantes). Por exemplo, um associado pode contribuir com o Instituto por meio de recursos (sejam eles financeiros, materiais) e/ou tempo (trabalho/serviços para o instituto ou sede/talentos/anfitriando eventos). Desta forma, conseguimos acolher aquilo que está disponível e é necessário para o fortalecimento do instituto. No caso dos participantes, as formas de contribuir são diversas. As nossas atividades possuem vários formatos de troca financeira, assim como gratuitas. Sempre convidamos os participantes</p>

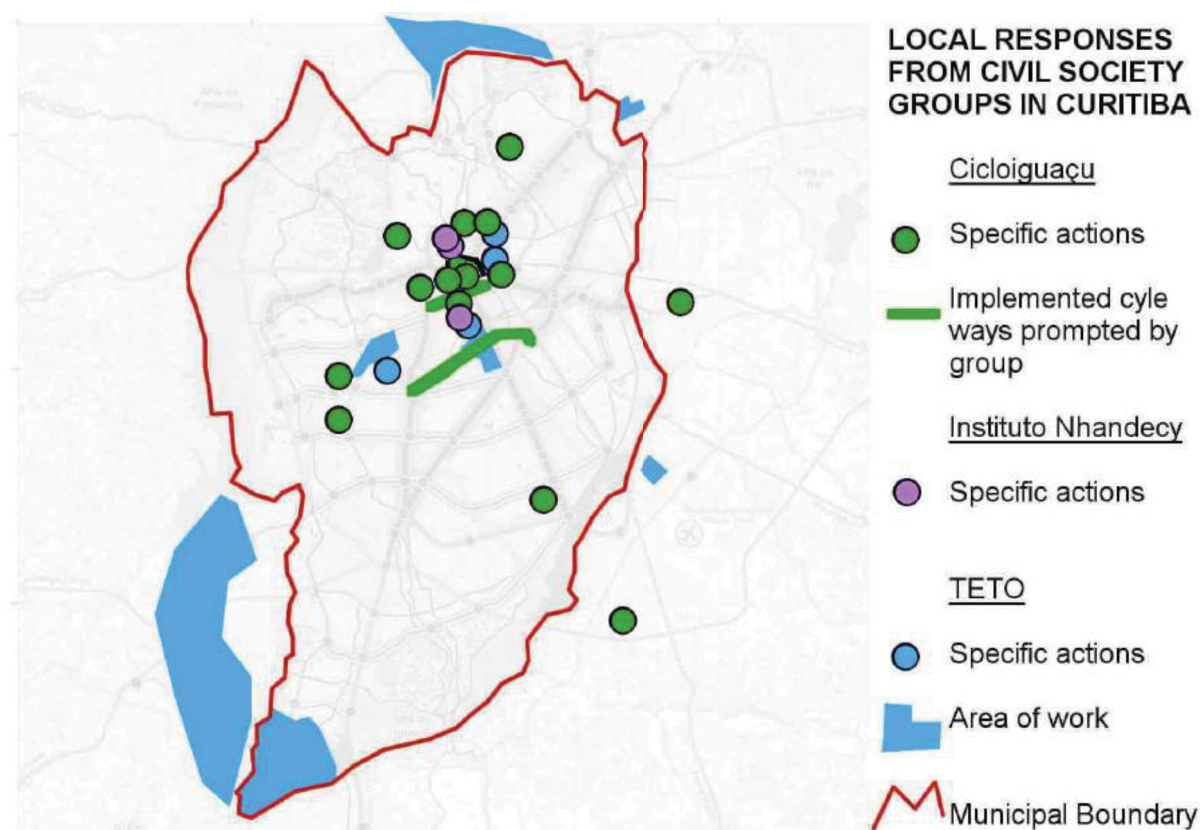
	para praticar a corresponsabilidade conosco. Então, um dos formatos é a contribuição espontânea. Em outros, também trabalhamos com "money pile", processo onde compartilhamos os custos de realização do encontro e deixamos os participantes decidirem o quanto querem contribuir pelo trabalho realizado (facilitação/ensino) e depois fazemos a distribuição dos recursos (pilha de grana) de acordo com as necessidades/sonhos das pessoas que organizaram e realizaram o evento.
9	Sim. Isso acontece de duas formas, pelo menos. Uma delas é que em todos os encontros convidamos os participantes à praticar a corresponsabilidade, então, desde o primeiro contato ele pode assumir tarefas e/ou papéis que queira experimentar. Depois, caso queira fazer parte do Instituto, indicamos que el@ conviva com a comunidade para deixar brotar em seu coração as intenções de onde colocar sua energia. Isso pode ser em um projeto em andamento/sonho, onde el@ pode somar seus talentos e/ou começar um projeto do zero.
10	Todas! Já está acontecendo.

TETO RESPOSTA AO QUESTIONÁRIO

#	REPOSTA
1	Trabalhamos em algumas das favelas mais precárias com projetos de habitação e infraestrutura, de maneira conjunta com os moradores desses assentamentos, a fim de fomentar o desenvolvimento de maneira integral destes territórios. Na RMC atuamos no Parolin, Caximba e Portelinha (Curitiba); Favorita (Araucária); Jardim Independência (São José dos Pinhais) e Vila Nova (Colombo).
2	O TETO é uma organização internacional, presente em 19 países da América Latina e Caribe, além de escritórios nos EUA e Europa. Desta forma, assim como muitas vezes enviamos recursos financeiros para o escritório central (de maneira a colaborar com países que possuem mais dificuldades em captação), também recebemos. Além disso, é comum recebermos intercambiastes para estágio voluntário em nossos escritórios. Mas não nos relacionamos diretamente com as organizações multilaterais.
3	Em todos os países precisamos seguir as mesmas diretrizes de modelo de trabalho, que consiste em 4 etapas: identificação e caracterização das favelas; gerar espaços participativos e desenvolvimento de soluções concretas (habitação, projetos de infraestrutura simples, etc.); estabelecer o que chamamos de "mesa de trabalho", que consiste numa instância para planejar e executar programas e projetos em benefício da comunidade; por último, as soluções definitivas. Além disso, seguimos os mesmos valores, visão, missão e propósitos.
4	Precisamos prestar atenção nos desafios de implementação em campo do modelo de trabalho, visto que os territórios possuem dinâmicas diferentes e é necessário adequar para as particularidades que encontramos.
5	O TETO é uma organização internacional, presente em 19 países da América Latina e Caribe, além de escritórios nos EUA e Europa. Desta forma, assim como muitas vezes enviamos recursos financeiros para o escritório central (de maneira a colaborar com países que possuem mais dificuldades em captação), também recebemos. Além disso, é comum recebermos intercambiastes para estágio voluntário em nossos escritórios. Mas não nos relacionamos diretamente com as organizações multilaterais.
6	Não. Precisamos trabalhar em conjunto com os governos estadual e municipal de maneira a buscar as melhores soluções para as favelas. Além disso, nossa atuação depende de uma validação sobre a possibilidade de trabalho nesses territórios, considerando se há conflitos fundiários ou outros desafios que possam impedir nossa atuação.
7	Aqui no Brasil tem a Habitat Para Humanidade, que trabalha em favelas no melhoramento de habitações e projetos de infraestrutura. Eles também são uma organização internacional. Não sei muito sobre os desafios que eles enfrentam, mas acredito que tenha algumas semelhanças. Aqui em Curitiba também tem uma organização chamada Coletivo Trena, que trabalha
8	É necessário para participar das ações pontuais, a fim de custear seus próprios gastos (camiseta, transporte, seguro, alimentação), sendo que a maioria trabalha para o TETO de maneira voluntária. Também temos voluntários que trabalham semanalmente, sem qualquer custo. Nossa estrutura conta, atualmente, com cerca de 40 pessoas que são contratadas no Brasil para gerir toda a operação (são as únicas pessoas que recebem). Sempre estabelecemos uma porcentagem de vagas que deixamos disponíveis para quem não pode arcar com os custos.
9	Para os voluntários que trabalham semanalmente na organização, realizamos uma primeira

	instância de capacitação em relação a instituição, na qual são repassadas informações sobre nosso modelo de trabalho, missão, visão, valores, etc. Todo o corpo do voluntariado é convidado a participar dos processos de tomada de decisão, independente do tempo que estão na organização.
10	Estamos em processo de mapeamento de outros municípios da RMC, a fim de podermos não só expandir nosso trabalho mas também ter um maior conhecimento de como são as favelas da região. Iniciamos nossos trabalhos em Minas Gerais ano passado e temos um plano de expansão para outros estados, sendo que devemos fechar o ano de 2022 com 7 estados com atuação do TETO - atualmente estamos em 5.

1.7.2 Mapeando os 3 Estudos de Caso



RESPOSTAS LOCAIS DE 3 ESTUDOS DE CASO

1.7.3 Conclusões

SOCIAL: CICLOIGUAÇU	INSTITUTO NHANDECY	TETO
CI sempre busca voluntários para participar e ajudar a desenvolver projetos em áreas de interesse. Sua área de atuação é na RMC, com alguns membros ativos nos dois municípios vizinhos de Pinhais e São José dos Pinhais. Dentro de Curitiba, eles tiveram alguns programas trabalhando diretamente com escolas em regiões mais periféricas. Eles	IN tem uma estrutura profundamente social, incluindo 13 subgrupos que atendem diferentes comunidades. Sua metodologia suporta comunicação profunda, incluindo escuta ativa. As dinâmicas sociais e de comemoração são muito importantes para o grupo, compartilhando alimentos e tendo muitas oficinas baseadas no toque, na dança e em dinâmicas similares. Geograficamente IN são muito	Totalmente focado em questões sociais no Brasil. Todo o trabalho acontece nas áreas mais pobres de Curitiba, muitas vezes em áreas com problemas sociais difíceis. 6 principais áreas de trabalho. Filosofia central R2C. Construa casas e desenvolva liderança

veem seu trabalho ligado ao R2C, enquanto eles se concentram nos direitos das bicicletas, eles também trabalham para o transporte público e mencionam o aumento dos custos e sistemas de ônibus desconectados entre diferentes municípios como uma questão de preocupação para as comunidades mais pobres da periferia da cidade.	limitados, quase todas as suas atividades acontecem dentro de seu espaço. Em duas ocasiões eles realizaram algumas atividades de plantio que o parque público ao lado, que é altamente subutilizado. Às vezes os membros da IN participam com outras ações na cidade, mas como indivíduos. A educação GAIA, seu principal projeto, contém um módulo inteiro sobre social.	nas comunidades. Trabalhar na política urbana também. Forte foco na experiência dos participantes no processo. Desenvolver técnicas de liderança com pessoas da comunidade. Trabalhar em 5 municípios da RMC.
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ECONOMICO: CICLOIGUAÇU	INSTITUTO NHADECY	TETO
O CI é executado localmente e suas formas de apoio internacional vêm na forma de pessoas de fora vindo para apoiar sua rede para desenvolver problemas de mobilidade na cidade em dois momentos principais; para o fórum FMB3 em 2014 e pelo MoU com direitos holandeses, primeiramente com o governo em 2015 e depois com os alunos do Twete em 2017. Eles não recebem nenhuma assistência financeira direta de fora. Todos os membros são voluntários; eles aumentam o fluxo de caixa dos membros que pagam assinaturas anuais. Eles às vezes executam rifas e eventos sociais no BC. Para o FMB3, eles criaram uma página de financiamento on-line com a qual puderam cobrir os custos da conferência, o que garantiu que o público pudesse participar dos eventos gratuitamente. A partir do envolvimento com o CI, muitos membros conseguiram desenvolver empresas acadêmicas ou privadas.	Econômico. Muito forte. Tem muitos sistemas de troca e comunidade eco consomem grupo. Pratique economia solidária. Co-alugar casa em Mercês com 2 outros grupos. Os membros podem receber pagamento de atividades. Tem muitos eventos gratuitos, mas a maioria dos eventos é cara. Pratique escalas de pagamento deslizantes. O curso GAIA completo é de 3.550 \$ R. Eles enviam dinheiro para o GAIA internacional. Convide outros grupos para realizar eventos, ajudando-os a obter independência econômica. Seu programa GAIA levou a alguns projetos em desenvolvimento que levam à independência econômica dos responsáveis.	Grupo internacional, dinheiro trocado em ambas as direções. Fortes orientações e metodologia em vigor. Emprega cerca de 40 pessoas em Curitiba. Grande grupo de vols que trabalham em eventos. As pessoas pagam por eventos. Projetos precisam de contribuição financeira das comunidades. Projetos expõem realidades econômicas desiguais, trabalham também para desenvolver uma compreensão crítica da situação econômica. Ajudar os líderes comunitários a participar de políticas públicas para garantir a infraestrutura básica.

ECOLOGICAL: CICLOIGUAÇU	INSTITUTO NHADECY	TETO
Algumas das suas propostas urbanas foram realizadas na cidade, incluindo ciclofaixes, a área Calma, Vaga Vivas, Praça Ciclista, pontos de estacionamento de bicicletas. Embora não tenham sido construídos com os fundos da CI, eles foram implementados pelo conselho por meio de pressão política e cultural contínua da CI e de suas comunidades relacionadas, das quais recebem forte apoio. Realize estudos acadêmicos em questões ecológicas urbanas.	Eles fizeram mudanças no jardim do seu espaço e plantaram algumas plantas comestíveis na praça próxima. Seu programa econômico apoia outros produtores de alimentos na área mais ampla de Curitiba. Tem diminuído muito para mudar os pensamentos das pessoas e, possivelmente, os hábitos de consumo, mas com pouco impacto no reino construído da cidade. Influenciou novos grupos que poderiam ter feito alterações locais.	Construiu com sucesso dezenas de casas em Curitiba RMC. Também desenvolvendo infraestrutura com comunidades. Desenvolvi banheiros ecológicos com MST em Caximba.

WORLDVIEW: CICLOIGUAÇU	INSTITUTO NHADECY	TETO
Os IC sentem que fizeram um impacto muito forte na sociedade em um curto	NI assisaram muitos critérios e diferentes	O crescimento rápido do TETO mostra impacto.

<p>período. Desde o início, eles tiveram um forte componente político, engajando-se em advocacia. Em 2014, seu coordenador concorreu a um cargo público, embora não estivesse concorrendo, deu visibilidade ao seu trabalho e campanhas. Em 2016, com a eleição de Goura, eles conseguiram ter alguém dentro do governo local, o que ajuda muito a promover as visões de suas comunidades nesse domínio. Eles têm reuniões regulares, como um dos GTs que se reúnem regularmente com Goura. Dentro de sua equipe, eles têm muitos designers que ajudam em trabalhos online, cartazes, em geral e para o festival FMB3 eles tiveram muito apoio. Seu trabalho foi exibido em uma galeria de arte após a conferência também.</p>	<p>grupos diversos com a partilha do espaço. Eles facilitam o uso de metodologia específica. Espaço muito forte para a dinâmica feminista também. Enquanto muitos grupos interagem, não há muito trabalho com eles fora do espaço. Componente espiritual muito forte para o seu trabalho, nome vindo da cosmovisão e dialeto indígena local. Independente do governo local e nacional</p>	<p>Trabalhe profundamente transformador para os participantes. Trabalhando em todas as formas de atividade política. Os trabalhos afetam as comunidades marginais, mas também deslocam as percepções das classes médias e forçam, suavemente, a repensar a igualdade e o privilégio no Brasil. Fortes habilidades de comunicação. Estrutura da ONG internacional é muito avançada, com vários níveis de engajamento e aprendizagem de habilidades. Também desenvolvendo angariação de fundos de caridade de rua.</p>
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1.8 CONCLUSÕES

O Brasil tem muitos problemas que precisam de atenção urgente. Ainda é um país profundamente dividido, desigual e violento. A atual crise econômica iniciada em 2015 provocou instabilidade mais ampla, maior insegurança econômica e aumento do desemprego. As medidas de austeridade impostas ao país em 2016 podem exasperar ainda mais esses fatores, se o Brasil seguir o mesmo caminho da Grécia e a Espanha após o ano de 2008. O aumento da precariedade e a falta de recursos está levando a um aumento da violência e da insegurança. Tanto que, em 2018 o exército assumiu o controle do policiamento nas ruas de Rio do Janeiro. Existem muitos fatores para os males do Brasil que incluem: corrupção endêmica, divisão profunda de classes sociais, educação inadequada, exclusão de vastos setores da sociedade por classes políticas e falta de preocupação, compreensão e solidariedade de setores prósperos da sociedade para os setores mais pobres. Abordar isso, criar uma sociedade mais segura e igualitária é um grande desafio. Sem um único caminho certo, vários grupos estão tentando estratégias diferentes.

Curitiba é justamente celebrada por grande parte dos passos urbanos que tomou nas últimas décadas, desde que o trabalho de Lerner começou em 1971, no entanto, desde o início dos anos 90 ela “descansou sobre seus louros”. Nas últimas

décadas, a cidade, em geral, tem lutado para lidar com uma população em rápida expansão que atravessa as fronteiras municipais e exige uma resposta combinada de todas as prefeituras, dentro da Mancha Urbana, trabalhando juntas. Embora a campanha de marketing de Curitiba tenha a vendido como uma cidade modelo e ecológica nos anos 90, ela evitou de mostrar o crescimento de realidades sociais difíceis e inconvenientes, como o enorme aumento de ocupações irregulares (favelas) desde os anos 80, na periferia. Já existem barreiras entre comunidades tradicionais no centro de Curitiba e comunidades mais novas, levando ao aumento da insegurança e a RMC, recentemente, se tornando uma das cidades mais violentas do Brasil. Os primeiros sucessos urbanísticos e de planejamento urbano de Curitiba ocorreram numa maneira de cima para baixo, devido a ditadura militar, que durou até 1985. Há crescentes apelos para que o governo de Curitiba envolva os cidadãos no processo de planejamento de maneira mais completa, aumentando assim, sua participação democrática no processo de construção da cidade, incluindo: Moura 2005, Irázabal 2009 e Mobiliza Curitiba 2014.

Muitos grupos atualmente ativos em Curitiba tentaram e demonstraram que uma estratégia em duas frentes é necessária. Uma área deve se concentrar no desenvolvimento de questões culturais, para tornar mais fácil e atraente a participação de pessoas em movimentos que buscam mudanças urbanas ecológicas. Uma chave para isto são que ações e movimentos sejam tão acessíveis quanto possíveis, inclusive economicamente, e almejem as culturas mais diversas possíveis. A segunda área é envolver-se no processo político para efetuar a mudança desejada. Trabalhando em questões locais e desenvolvendo projetos em uma forma de comunidade, novas conexões estão sendo feitas, baseadas no desenvolvimento da confiança, aproveitando os aspectos sociais em grupo e permitindo que todos tenham a oportunidade de participar do grupo principal, onde as decisões são tomadas coletivamente. Houve várias vitórias recentemente em Curitiba, o que mostra que é um bom momento para a cidade, o que, pode levar a grandes vitórias em breve. O autor identificou a possibilidade de que a estrutura desenvolvida com o vereador Goura e os vários grupos de trabalho poderão se desenvolver em um projeto municipalista para a cidade, semelhante ao de Barcelona.

Uma chave para o sucesso, segundo vários atores, é poder trabalhar em conjunto em campanhas ou com objetivos semelhantes. O autor observou que

inicialmente haviam problemas consideráveis nessa área, por uma série de razões, mas que, recentemente ocorreram mudanças consideráveis devido aos novos agrupamentos, os quais estão se unindo para co-criar novos projetos. Intrinsecamente ligado a isto, está a localização das ações e para qual público-alvo elas são direcionadas. Enquanto muitos grandes projetos existem em Curitiba, muitos se concentram em partes seguras, estabelecidas e mais ricas da cidade e atraem ou são frequentados pelas classes mais altas da sociedade. Enfrentar verdadeiramente as crises interconectadas, incluindo as ecológicas, projetos e movimentos precisam se conectar mais com comunidades da periferia, comunidades informais, favelas e áreas com maiores problemas sociais. A interação entre grupos ecológicos estabelecidos e comunidades estabelecidas pode melhorar muito os desafios para ambas as partes. Se os projetos ecológicos forem estruturados de maneira acessível, há uma chance muito grande de que o projeto se expanda rapidamente. Ainda, existem muitas barreiras a serem quebradas na sociedade brasileira e qualquer grupo que esteja trabalhando nesse sentido, está tentando abrir um novo caminho. O mais recente projeto, de mais de 15 grupos, os quais, começaram a trabalhar juntos em Parolin, oferece grande esperança.

Para que os projetos sejam bem-sucedidos, há uma série de fatores a serem considerados, incluindo a visão de mudanças reais no cenário urbano, e não apenas conversas sobre o assunto. Projetos bem sucedidos trabalham com boa organização e com bons sistemas de comunicação, mas também possuem a capacidade de compartilhar responsabilidades, encontrar usos para as habilidades que todos possuem e criar um ambiente positivo sobre o projeto, que é cheio de esperança, alegria, celebração e um senso coletivo de aventura real. Os enormes desafios no mundo de hoje não podem ser algo apenas para os profissionais. O ponto importante é criar meios, com os quais, todos os cidadãos possam acessar e participar do processo para criar um mundo melhor, onde todo homem, mulher e criança podem ajudar a construir sua cidade.

1.8 CONSIDERAÇÕES FINAIS

Evitar a destruição da humanidade repousa em nossa capacidade coletiva de consertar nossas cidades. As cidades se tornaram a linha de frente, onde uma ação

apropriada é necessária, rapidamente, para evitar a crise climática e construir resiliência para lidar com futuros choques.

O termo Cidades Sustentáveis está estabelecido há muito tempo, mas tem se esforçado para abraçar novos conceitos, com os quais, as cidades devem lidar hoje, como a resiliência e a regeneração. Esta dissertação sugere que o termo solto e ainda indefinido de Ecocidades poderia substituir o termo Cidades Sustentáveis, incorporando todos os conceitos atuais, junto com os do futuro, para encapsular o sonho utópico do que as cidades poderiam ser ou ainda devem se tornar. Essas cidades devem ser para todos os cidadãos e não para uma pequena mazela da população. Eles devem lidar com a cidade inteira e todos os desafios associados, e não apenas criar comunidades ou regiões fechadas, só para os ricos, isolados do sistema urbano mais amplo do qual fazem parte.

Esta dissertação sugere que a metodologia, a prática e a comunidade global da ecovila GEN devem formar a base para uma verdadeira rede global da Ecocity. GEN consiste em mais de 10.000 comunidades, incluindo dois distritos urbanos, com todos os continentes do planeta representados. A rede deles é a culminação de 20 anos de experiência de uma comunidade global diversificada. GEN deseja uma ampliação planetária, para onde “cada aldeia é uma ecoaldeia, cada cidade uma cidade verde”, sem perder seus 3 valores centrais: 1) Estar enraizada em processos participativos locais; 2) Integrar dimensões sociais, culturais, econômicas e ecológicas em toda uma abordagem de sistemas para a sustentabilidade 3) Ativamente restaurando e regenerando seus ambientes sociais e naturais. O desafio da Ecocity é entender como essa visão pode ser implementada globalmente nas grandes cidades atuais, e o municipalismo aqui, oferece soluções.

Para obter a parte ecológica correta em nossas comunidades e no planeta, precisamos corrigir a parte econômica, pois ambas estão intrinsecamente conectadas. Os sistemas econômicos ecológicos vivem dentro dos limites da vida na Terra e não no modelo do crescimento sem fim. O atual sistema de capitalismo global sob a atual forma de neoliberalismo não é compatível com tal sistema sustentável; para isto, o fim do capitalismo é necessário. A base da transição necessária está centrada na reconstrução das nossas relações com a energia, acima de tudo; petróleo. Enquanto muitas formas de alternativas existem, esta dissertação sugere um modelo de Ecocity, a qual, é parte de uma solução *PostCapitalist* para o planeta, cujos caminhos são baseados em respostas criativas

decrecentes aos desafios gêmeos do aquecimento global e pico de petróleo, as quais vem sendo, hoje, desenvolvidas por muitos grupos.

Um acordo comum do tempo gasto com os grupos investigados até agora, é que Curitiba não é uma cidade sustentável, ou uma Ecocity. Embora tivesse alguns anos de planejamento esclarecido, embora em sua maior parte, durante uma severa ditadura militar autoritária, a cidade em geral luta hoje com uma metrópole em rápido crescimento. Os municípios precisam trabalhar melhor em conjunto, sendo que os prefeitos devem se comprometer com um desenvolvimento verdadeiramente sustentável, facilitando uma estrutura maior de PC. Apesar do direito à cidade estar consagrado na legislação brasileira e dos crescentes apelos da sociedade civil, para que o governo de Curitiba aumente a participação de seus cidadãos, no processo de construção da cidade. Até agora, o governo não tem facilitado verdadeiramente o modelo de estruturas ou processos que a sociedade civil deseja ver. Embora, tanto a Prefeitura quanto o IPPUC tenham se engajado em “reuniões participativas” durante os recentes eventos de planejamento geral em todas as regiões dos municípios, estes foram considerados apenas gestos simbólicos.

Desde os novos movimentos focados na ação direta em 2007, Curitiba começou a ser transformada através de SMs baseados em ecologia radical, PC, inclusividade e um movimento cultural vibrante para efetuar mudanças políticas na paisagem urbana. Nos últimos anos, estes movimentos amadureceram, conquistaram muitas vitórias e passaram a ocupar instituições municipais. Com o crescimento de mais hortas comunitárias e projetos semelhantes em pequenas escalas, novas redes de cidadãos estão se formando no âmbito público, facilitando um meio de envolvimento cara a cara muito necessário, o qual promove a confiança. Com a eleição de Goura em 2016 e seu modelo de estrutura municipal aberta a todos os cidadãos, foi criada uma grande oportunidade de desenvolver estes movimentos e projetos de cidadãos locais em algo mais profundo, como acontece atualmente com outras cidades e comunidades globais, como Barcelona e Rojava, na Síria. Diante das crises ecológicas globais, os movimentos de cidadãos poderiam transformar Curitiba em uma Ecocity. Longe de ser ideias esperançosas, esta dissertação apresentou a gravidade da crise que a humanidade enfrenta, portanto, a este respeito, estas mudanças não são apenas o que seria desejável, elas são o que é necessário.

A PC é a chave para alcançar estes objetivos, construindo soluções locais acessíveis baseadas no compartilhamento dos valores econômicos, educacionais, políticos e culturais. O desafio é multiplicar as soluções existentes e conectar as comunidades. Assim, tornando a cidade mais verde, consertando a cidade. Enquanto diferentes grupos que trabalham nestas áreas desenvolveram uma ampla gama de estratégias, esta dissertação tentou demonstrar que as ações, projetos e movimentos mais bem sucedidos são baseados em projetos abertos e altamente acessíveis, onde e possível, com ações acontecendo no âmbito público, facilitar um diálogo coletivo sobre a qualidade do espaço público e os direitos dos cidadãos. Isto envolve uma visão sobre questões econômicas e questões que afetam as comunidades mais pobres, como a falta de interconectividade entre os serviços de ônibus de diferentes municípios, juntamente com aumento dos custos das tarifas de ônibus. Os projetos que estão realizando mudanças, hoje, também buscam diversificar seus movimentos, não apenas criando ações em áreas seguras da cidade e esperando que as comunidades periféricas participem por razões ecológicas, ao invés disso, conectando-se com essas comunidades, entendendo as realidades do dia a dia e desafios enfrentados, compartilhando pontos de vista e compreensão, trabalhando juntos com objetivos compartilhados. Nestas situações, não há hierarquia entre comunidades, não há melhores ou piores, ambas têm muito a aprender e compartilhar. A união faz a força. Um dos desafios para todos os grupos, atualmente ativos, é melhorar as técnicas de trabalho em grupo, visto que foram observados problemas existentes, nesta área, nos últimos anos. Alguns projetos atuais apontam para um novo capítulo, no qual, diversos grupos estão trabalhando juntos, especialmente as recentes atividades do Coletivos em Movimento em Parolin.

A realidade do Brasil e de Curitiba é que eles tem comunidades bem divididas. O Brasil tem enormes problemas de pobreza e criminalidade que afetam negativamente as forças governamentais, as quais incluem o domínio urbano e o domínio público. Os riscos são reais, a violência é extrema. São necessárias soluções verdadeiramente holísticas, que abordam as histórias passadas de economia e desigualdade. Com a atual crise econômica, a situação provavelmente piorará antes de melhorar. Não basta simplesmente construir comunidades ecológicas para a minoria rica da sociedade brasileira. Embora as soluções caras, eco e *hi-tek* possam, de fato, fazerem parte das soluções para os problemas atuais,

o que é realmente necessário, é uma visão de como poderia ser um Brasil mais pacífico e sustentável. Uma visão que é criada através de diversos diálogos e momentos entre pessoas diferentes, de diferentes sexos, classes, cores e origens. Posteriormente, é preciso criar estruturas que possam facilitar a participação de todos os cidadãos na transformação da sociedade. Sempre que possível, as oportunidades econômicas precisam ser tratadas adequadamente, pois, se as pessoas não têm alternativas, as drogas, gangues e violência oferecem as únicas soluções. Se as classes mais ricas continuarem evitando esta realidade, os problemas provavelmente ficarão piores.

Em conclusão, apesar dos graves problemas do Brasil, esta dissertação é esperançosa de que a mudança necessária não é apenas possível, mas já está acontecendo. Grupos examinados aqui oferecem vislumbres de uma sociedade ecologicamente correta e mais justa, construída sobre a PC. Espero que esta dissertação possa ajudar nesta aventura coletiva.

2 INTRODUCTION

The problem that the dissertation addresses is what urban actions by Civil Society groups are happening currently in Curitiba city (IMAGE 1), which address today's global crises and attempt to create local solutions based on **Urban Sustainability** and **Citizen Participation**. The dissertation thoroughly examines these 2 topics, exploring both past and present theory and urban actions from around the world, to develop a framework of understanding from which current actions in Curitiba can be analysed. The geographical limit of the research is the Metropolitan Region of Curitiba (RMC) and the timeframe is limited to recent urban actions.

This dissertation argues that humanity faces incredible challenges today, due to environmental and social crises on a global scale and that cities are at the forefront of these challenges. It is acutely aware of the level of threat posed by the current crises, as Capra (1996, p, 304) outlined: humanity's survival. Due to the supposedly normal way of life of today's modern world of industrial civilization, we are faced with the situation where "The earth is rapidly dying: her forests are dying, her soils are dying, her waters are dying, her air is dying" (SHIVA, 1988, p. xii), due to the ongoing process of Planetary Urbanization (MERRIFIELD, 2013) of increasing demands for resources from the rapidly growing consumer population of global cities.

While recognizing the enormous challenges, the dissertation is hopeful that the necessary solutions can be achieved to ensure humanity's survival, albeit with major societal shifts. The dissertation shares the views of many that the city is the frontline of this needed transition, hence it explores: **City as the Solution**. Acknowledging Curitiba's contribution to this theme, we remember the words of its former mayor and architect Jaime Lerner; "Cities are not problems, they are solutions" (2007, p. xx). Origins and developments of the topic of Sustainable Cities are examined, alongside contemporary calls that advocate the need to go further. New theories and practical examples, at various scales, are explored from cities and communities around the world, including Urban Resilience (HOPKINS, 2008; NEWMAN ET AL, 2009) and Girardet's Regenerative City (2014) proposals. The United Nations have also added to the discussions with their ambitious 11th Sustainable Development Goal: To make cities Inclusive, Safe, Resilient and Sustainable (UN, 2015), followed by the New Urban Agenda that was launched in Quito, Ecuador at Habitat III in 2016. Which are both based around important social issues like equality and global poverty reduction.

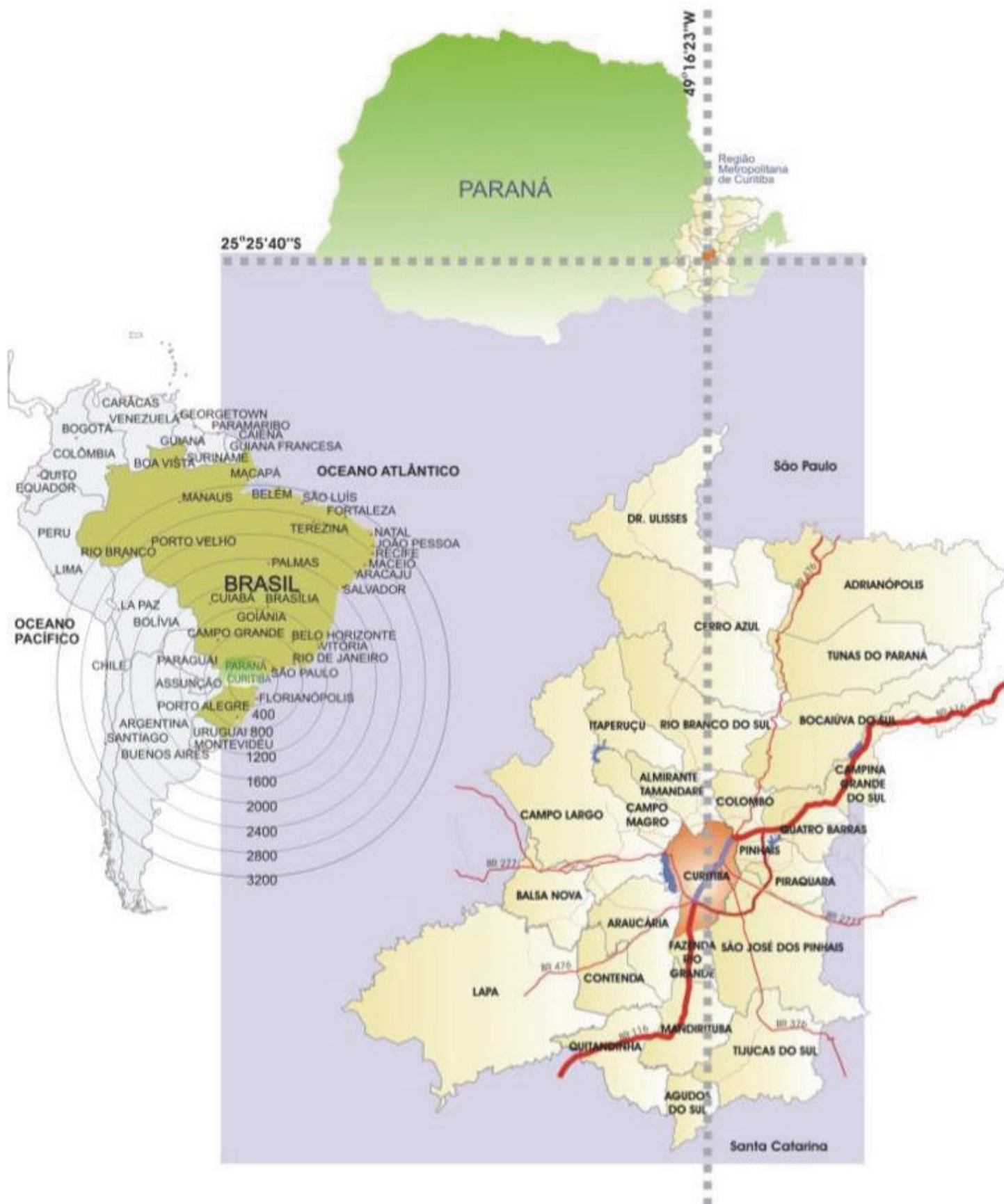


IMAGE 1 – LOCATION OF CURITIBA MUNICIPALITY & RMC
SOURCE: COHAB-CT; IPPUC, (2007).

Exploring ideas that seek to move beyond Sustainable Cities, the dissertation examines the concept of Ecocities. A term not fully defined, but that encapsulates a utopian dream of what cities might yet be. Whatever term is finally agreed upon, it must respond to the challenges of the full city and not just create more forms of gated communities, isolated from the wider world. In exploration of Ecocity projects for all citizens and not the few, the dissertation finishes this section by examining how GEN, the Global Ecovillage Network, could provide a possible future pathway. At the forefront of the resilience movement, with over 20 years of experience by a diverse global community, GEN has a sound theoretical and practical structure to build upon. Their dream where “every village is an ecovillage, every city a green city” (JOUBERT, 2017) is built around a common base: locally owned communities that are participatory processes. Which leads us to our second area of investigation.

The dissertation identifies **Citizen Participation** as the ability for citizens, normal people, to engage with and participate in local systems so as to affect the world around them, at all scales, from the micro to the macro. This process happens in different spheres of the political realm, in processes that stretch as far back as the “Birth of Democracy” in Greece 2,500 years ago, with active citizenry forming the base for fair and healthy structures and processes. This section examines a range of issues surrounding this concept, in both theory and lived realities, from the “Birth of Modernity” in the revolutionary streets of Paris in 1789 to more recent dynamics such as current responses to Today’s Global Crises, including; The Right to the City, Municipalist Solutions and Urban Revolts in the Network Age. This section also includes analysis from experiments happening today which are radically pushing the frontiers of our understanding, while also inspiring similar projects around the world. The dissertation examines the Confederalist revolution in Rojava, inspired by the Social Ecology theory of Murray Bookchin, and the Rebel Cities solutions from Spain. In the former network structures for bottom up governance are examined, in the latter, attention is given to various aspects of the communication techniques used in Barcelona to enable the “Feminist Democratic Revolution” to unfold.

After outlining the Methodology structure, the **Case Studies** section assesses Brazil and the rapidly changing secondary city of Curitiba. The Global South is where the largest urbanization shifts on the planet have happened in recent times. Brazil’s accelerated process of urbanization in the 2nd half of the 20th century saw a tenfold increase in Curitiba’s RMC population due to rural-urban migrations.

Curitiba has been seen as a leader in the area of ecologically based urbanism since the 1970s; being the location of Ecocity Builders 4th Ecocity World Summit in 2000, winning 2010's Globe Forum Sustainable City Award and The Ecologist magazine labelling it as The Greenest city on Earth in 2014 (BARTH). Also, In 1996 the UN called it "the most innovative city in the world". Many feel that since the early 1990s the city has "rested on its laurels" (IRÁZABAL, 2009) and failed to address serious growing challenges that have arisen since then. In fact, As Mendonça (2002), Moura (2009) and others have pointed out, there are two Curitiba's today (IMAGE 2): One is the "Ecological Capital", known and celebrated around the world: The other is Curitiba's periphery, unknown, unloved, feared, even by the cities own Curitibaanos.



IMAGE 2 – 2 CURITIBAS, CENTRE & PERIPHERY
SOURCE: 1: WIKIMEDIA (2009) 2: GOVERNMENT OF PARANA (2013)

As seen above; while there are parts of the city that work fantastically in terms of compact urban design, world changing transport innovation and the planets highest green area per capita quota; There are other areas with open sewers, no infrastructure, grave social problems and little assistance, where it is near impossible to move after the regular heavy rains the city experiences. Since the 1980s there has been a massive growth of informal settlements (*favelas*) in the periphery of the rapidly growing city. In 2000 the RMC was Brazils 5th highest urban area with the highest number of favelas (ALBUQUERGUE, 2007). The city today is not only the municipality of Curitiba, it is an entity that crosses municipal boundaries and requires a combined response from all City Halls working together. Like much of Brazil, big divides exist between older communities in Curitiba's centre and newer communities in the periphery, based on ignorance, prejudice and fear. Sadly too, Curitiba has recently become one of Brazils most violent cities. Recognizing that Curitiba's earlier urban design and planning successes happened in a very top-down fashion, this dissertation adds to growing calls for Curitiba's government to involve all citizens in the planning process in a more thorough way, to increase their democratic participation in the process of making the city.

This dissertation is based on hope. The exploration has shown that there are some very exciting new processes in the city that are choosing to engage with all citizens of the city. Groups, open to all, are choosing to engage with different issues and begin to at least try to improve things for their fellow citizens. This dissertation has explored the city as a living organism. It has looked for, identified and analysed urban actions as cell-like entities, as possible catalysts for sustainable urban change. It is confident that the city is at a turning point and that these new movements are capable of creating a new chapter for the city, for cities everywhere. 50 years after Lefebvre shared his Right to the City ideas, Curitiba can offer some responses.

The author is not Brazilian, but lived there from 2014 until completion of the dissertation in March 2018. Although the dissertation is written in English, all investigations took place in Portuguese. Please allow for some things being lost in translation and some opinions shared appearing odd, coming from Irish gringo eyes. For this dissertation, the author has used a Participatory Action Research approach inspired by Social Ecology principles, seeking to understand the world by trying to change it, collaboratively and following reflection, with the author learning about, with and from groups currently active within the Metropolitan Region of Curitiba.

2.1 RESEARCH PROBLEM

In response to today's global crises, what processes organized by Civil Society groups which have some form of international component, currently exist in the Metropolitan Region of Curitiba that allow for increased Citizen Participation in the construction of a more Sustainable City. Having investigated current theories about what constitutes more sustainable forms of urbanism, what is the current reality of the city celebrated in recent years as Brazil's "Ecological Capital", what are the chief problems the city faces today, what strategies are being employed to resolve them by Civil Society groups and what opportunities or problems exist for normal citizens to participate in processes for ecological urban change.

2.2 JUSTIFICATION

Current crises could signify the end of humanity (CAPRA, 1996; KLEIN, 2014). Since 2009 the majority of humanity are now urban dwellers and by the year 2050, it is expected three-quarters of the world's population will live in cities (UN, 2009). Cities are currently part of problem, our challenge is to understand how they can become part of the solution. The challenge of recent decades was to create Sustainable Communities (CAPRA, 1996), which led to ample steps toward the creation of more Sustainable Cities (ROGERS, 1995 & 1997; GIRARDET, 1999; NEWMAN, 1999; O MEARA, 1999; BROWN, 2005; LERNER, 2007).

These concepts have been built upon in more recent years with the addition of new perspectives and concepts, such as Permaculture (HOLMGREN, 2002), Resilience (WALKER ET AL. 2004; HOPKINS, 2009; NEWMAN, 2009), The Regenerative City (GIRARDET, 2014) and many more. This led to the call from the United Nations in 2015 **To make cities Inclusive, Safe, Resilient and Sustainable**, which subsequently formed the basis of the the **New Urban Agenda** and **Habitat 3**.

Seeking to understand the **City as the Solution**, the paper also analyses the concept of Ecocities (REGISTER, 1987; ROSELAND 1997; MCDONOUGH, 2002; JOSS, 2009), including recent, grand scale and problematic projects in Asia (SZE, 2011; CAPROTTI, 2014, 2015; CUGURULLO, 2015, 2016), as well as the possibility

of scaling up the decades old Global Ecovillage Network process to include networks of eco neighbourhoods in existing and future cities to create a future ecocity system.

While Curitiba has been seen as a leader in the area of Sustainable Urbanism in recent decades (REGISTER 2001; BROWN, 2005; BARTH, 2014), past criticisms and current problems exist that the city must address or remedy:

- The cities 1990's marketing campaign as the Brazilian "Ecological Capital", which failed to mention the social and ecological problems of the growth of slums in the periphery of the rapidly growing city (MENDONÇA, 2002).
- A constructed image of the city that erased other discourses (MOURA, 2009).
- Ongoing problems faced by communities in the informal settlements of the periphery, occurring in ecologically sensitive and vulnerable hi risk areas, along cities riverbanks (PEREIRA & SILVA, 2011) and unresolved conflicts still existing which public policy doesn't adequately address (FRÓES, 2017);
- Growing safety concerns, with the city entering the list of 50 most violent cities in the world for the first time in 2014 (MEXICO'S CITIZENS' COUNCIL FOR PUBLIC SECURITY AND CRIMINAL JUSTICE, 2015).

A growing consensus has emerged between the incompatibility between the current economic model and the biological limits of life on planet earth (CLUB OF ROME, 1972; BROWN 1982; BRUNDTLAND REPORT, 1987; SHIVA, 88; JENSEN, 2006; KUMAR, 2009), with a diverse range of solutions being offered. This paper examines the arguments which identify capitalism as root cause of Global Crises today (BOOKCHIN, 1962; CAPRA, 2002; KLEIN, 2014; MASON, 2015) and call for Post, and/or, anti capitalist alternatives and pathways, which also suggest different forms of improved communication structures and processes to develop alternatives to today's dominant system (BOOKCHIN, 1987, CAPRA, 2002; HOPKINS, 2008)

From why and what to how. To fix our cities, the dissertation examines the range of suggestions on how Citizen Participation can act as the key process for urban transformation, aspects of which have been explored by different authors (BOOKCHIN, 1987; ALBERT, 2003; HOPKINS, 2008; REVI, 2016) including **Right to the City** (LEFEBVRE, 1968; HARVEY, 2012) as well as very recent forms of political organization, such as Radical Municipalism, (BOOKCHIN, 1987; HOPKINS, 2008; COLAU, 2016; SHEA BAIRD, 2015 & 2017; FINLEY, 2017) in some Spanish cities.

2.3 OBJECTIVES

2.3.1 Principal Objective

To investigate recent actions of Civil Society groups currently active in Curitiba RMC which have some form of international component and who are attempting to construct a more Sustainable City through Citizen Participation.

2.3.2 Specific Objectives

- i) Explore the origins and recent developments in both theory and practice regarding the idea of the Sustainable City and related concepts.
- j) Explore the origins and recent developments in both theory and practice regarding Citizen Participation, in the global sense.
- k) Explore the relative recent urban history of Brazilian cities, including summary of current situation and challenges faced.
- l) Develop overview of the urban development of Curitiba RMC and outline challenges the city faces today, especially in regard to Urban Sustainability and Citizen Participation.
- m) Develop and use the Participatory Action Research (PAR) approach inspired by Social Ecology principles, to participate with and assess groups active in the city.
- n) Investigate current urban actions of Civil Society groups in Curitiba RMC, which relate to Urban Sustainability and / or Citizen Participation, by developing an analysis method to evaluate groups currently active and their actions.
- o) Select and assess 3 groups currently active, who have all received international support. Issue questionnaire to each group and further assess impact of actions.
- p) Present analysis of these groups and actions through tables, maps, images and written reports from interviews carried out.

2.4 METHODOLOGY CONSIDERATIONS & DISSERTATION STRUCTURE

The dissertation is structured in 3 main chapters. The first chapter starts with the Introduction and presents the research problem, justification, main and secondary objectives and outlines the structure of the dissertation.

The second chapter is the Literature Review and is divided into two sections, the first relating to the city and the second section relating to Citizen Participation. This chapter forms the core area of the research and it attempts to provide a context with which to understand the complex landscape of the various projects later explored, so as to understand where different projects and movements are coming from and trying to go to. This chapter's first section, City as the Solution, relates to urban sustainability and the city in general, critically exploring current ideas of how the modern city can respond to the challenges facing humanity today. The second section explores aspects of Citizen Participation in the creation of sustainable urban communities. It explores a wide range of theoretical aspects, as well as practical lessons that can be learned from current Municipalist projects currently happening.

The third chapter concerns the Case Study of the dissertation and is divided into 6 sections. It investigates the urban actions of civil society groups that are active in Curitiba in recent years, whose area of work includes a focus on Urban Sustainability and Citizen Participation. First, It examines the recent history of Brazilian cities and of Curitiba, giving a short overview of the urban development and outlining challenges the city faces today. Second, after exploration and participation with city groups, an overview of current actions by different groups in the city is offered, outlining examples of new processes and actions that demonstrate newer approaches to the creation of a more sustainable city, as well as identifying problems that still need to be addressed. From this a list of at least 25 groups is created for deeper analysis. Thirdly, three groups from the prior list are explored in greater detail, with a questionnaire given to each group, as well as the authors report on ongoing participation in various actions with the different groups. This chapter ends with a conclusion of the Case Study, always considering the on-going discussion with the groups being researched.

The final chapters follow in typical fashion, with the theoretical aspects (chapter 2) and discussions developed in the Case Study (chapter 3) developed into Final Considerations. Which is followed by Chronogram, References and Appendix.

3 LITERATURE REVIEW

This chapter is divided into 2 sections: 1) City as the Solution 2) Citizen Participation. It explores a range of theory, develops arguments in each area and presents the combined conclusions at the end of the chapter.

3.1 CITY AS THE SOLUTION

In terms of what sort of cities should society attempt to create, this chapter investigates current urban realities, current projects underway and theory about what is still needed. **The Urban Age** (2.1.1) sets the contemporary urban context. It investigates the urban shift currently underway and the reality that an increasingly higher number of poorer communities find themselves in today's cities. The following sections explore the development of theory and practice regarding Urban Solutions. **The 21st century challenge: To create Sustainable Communities** (2.1.2) examines the slow unfolding of understanding regarding mankind's situation, from identification of an ecological problem, to calls for Sustainable Development, to Sustainable Cities. **Beyond Sustainability to Resilience and Regeneration** (2.1.3) examines calls to move beyond sustainability, looking at resilience, regeneration and specific factors for such urban solutions, such as local food production. **The question of Ecocities** (2.1.4) examines a still not fully defined concept that emerged over the last half century. It investigates recent negative developments of the concept in Asia and explores possible avenues where the project might yet go, building on ecological movements advocating urban solutions based on increased resilience in all areas.

3.1.1 The Urban Age

We find ourselves at a momentous turning point in world history. As recently as 1800, only 3% of human beings lived in cities. In the beginning of the 20th century, 10% of the world's population lived in cities. In the beginning of this century more than half of the world's population lived in cities, for the first time (UN, 2010). By 2050, it is expected that between two thirds and three quarters of humanity is expected to live in cities (UN, 2016). Brazil's current urban population is nearly 85% (PNAD, 2015), its Southeastern Region is 93%. Stewart Brand celebrates this global population shift in what he calls **City Planet**, outlining:

Cities accelerate innovation; they cure overpopulation; and while they are becoming the Greenest thing that humanity does for the planet, they have a long way to go (BRAND, 2009, p. 94)

In regard to the importance cities play today, Denver's former mayor, Colorado Wellington E Webb is often cited: "The 19th century was a century of empires; the 20th century was a century of nation states. The 21st century will be a century of cities" (IBM, 2009, p.12). Davis (2006, p.1) sees this urban phenomenon as of monumental historical impact: "it will constitute a watershed in human history, comparable to the Neolithic or Industrial revolutions".

On the social side, the reality of the urban shifts of recent decades means that today the majority of the world's population live oppressed and in poverty in urban slums (DAVIS, 2006) with most of these changes happening in the Global South, as outlined by Mike Davis in his **Planet of Slums** (p. 38):

Neoliberal capitalism since 1970 has multiplied Dickens's notorious slum of Tom-all-Alone's in *Bleak House* by exponential powers. Residents of slums, while only 6% of the city population of the developed countries, constitute a staggering 78.2% of urbanites in the least-developed countries

Davis offers some examples of these new urban dwellers (2006, p. 1):

Sometime in the next year, a woman will give birth in the Lagos slum of Ajegunle, a young man will flee his village in west Java for the bright lights of Jakarta, or a farmer will move his impoverished family into one of Lima's innumerable pueblos jóvenes.

Robert Neuwirth has lived in many of these slum communities around the world and has done the maths of this urban shift as outlined in his 2005 TED talk:

Today: a billion squatters, one in six people on the planet. 2030: two billion squatters, one in four people on the planet. And the estimate is that in 2050, there'll be three billion squatters, better than one in three people on earth.

Neuwirth requests that urban planners and municipalities engage with these communities to create the cities of the future:

The future of these communities is in the people and in our ability to work with those people... The issue is not urban poverty. The issue is for us to recognize that these are neighbourhoods. This is a legitimate form of urban development, and that cities have to engage these residents, because they are building the cities of the future. (NEUWIRTH, 2005, TRANSCRIPT)

The 2016 Pritzker prize-winning Chilean architect Alejandro Aravena addressed this problem in 2014, outlining that the solution is to channel people's own building capacity and bring the community into the design process (ARAVENA, 2014). Referring to what he labelled the "3S" menace: scale, speed and scarcity, He projected the scale of the global urban challenge:

By 2030, out of the five billion people that will be living in cities, two billion are going to be under the line of poverty. That means that we will have to build a one million-person city per week with 10,000 dollars per family during the next 15 years. A one million-person city per week with 10,000 dollars per family. If we don't solve this equation, it is not that people will stop coming to cities. They will come anyhow, but they will live in slums, favelas and informal settlements.

"Modern cities are a product of the oil age" (BROWN, 2005, p.36) and we need to understand the consequences of this process for the well being of planet Earth, to identify fully the problems and from that firstly identify possible alternative solutions, secondly begin the processes to bring about the necessary change. This section outlined how the world is urbanising very quickly, with the greatest changes happening in the Developing World, much of the time in informal development in the peripheries of cities, such as in Curitiba. These factors need to be addressed in regards to where urban groups are active today and with whom. From here we will trace the growing awareness of the urban problem and the evolution of alternative solutions.

3.1.2 The 21st century challenge: To create sustainable communities

In the last years of the last millennium, people finally realized the severity of the problems associated with the industrial process and urbanisation in the modern world, as Capra outlined: "The survival of humanity will depend on our ecological literacy – our ability to understand these principles of ecology and live accordingly" (CAPRA, 1996, p.304), those principles being: "interdependence, recycling, partnership, flexibility, diversity, and as a consequence of all these, sustainability", Adding in 2003: "Ecological literacy is the first step on the road to sustainability. The second step is the move towards ecodesign". Capra's declaration and collective invitation:

The great challenge of our time: to create sustainable communities - that is to say, social and cultural environments in which we can satisfy our needs and aspirations without diminishing the chances of future generations. (CAPRA, 1996, p.4)

The world's cities occupy just 2% of the Earth's land, but account for 60% of energy consumption, 70% carbon emissions, 70% Global Waste (UN, 2015). The process of urbanization needed to sustain them now affects nearly every corner of planet earth, as resources are mined and harvested, waters diverted, forests cut for industry's demand for the production of goods to be consumed in cities, in what Lefebvre referred to as the "complete urbanization of society" in 1970 and which current authors refer today as Planetary Urbanization (MERRIFIELD, 2013). Fixing the cities is the quickest way to fixing the planet, as Brown warns: "The bottom line is that the world is in what ecologists call an "overshoot-and-collapse" mode" and that "If we continue on the current economic path, the question is not whether environmental deterioration will lead to economic decline, but when" (BROWN, 2005, p.35). Worrying signs exist: shrinking forests, eroding soils, falling water tables, more frequent crop withering heat waves, collapsing fisheries, expanding deserts, deteriorating rangelands, dying coral reefs, melting glaciers, rising seas, more powerful storms, disappearing species, and, soon, shrinking oil supplies. Human impact is responsible for the 6th great mass extinction since life began, the Anthropocene, Wilson (2016) notes "We're extinguishing Earth's biodiversity as though the species of the natural world are no better than weeds and kitchen vermin. Have we no shame?"

With the signing of the Paris agreement in 2015, world leaders finally took steps to take action to deal with the climate crisis we are already well into, with current rate of CO₂ ppm in the atmosphere at 409¹, with 350 being the limit we needed to stay under to prevent runaway climate change (HANSEN, 2008). Since the 1970s, humanity has been in ecological overshoot, whereby a species uses resources faster than can be replenished. Today humanity uses the equivalent of 1.6 Earths to provide the resources we use and absorb our waste (REES, 1992). Although things seem bad, change is starting to happen. The critical questions are:

¹ Current figure at time of writing is 409,97 ppm, March 2018 from www.co2.earth

Can humanity avert destruction? If yes, what has to be done? What does this mean in terms of building human habitats, what sort of cities must humanity build?

Man has lived in and grown in cities for millennia, but it is only in the last half century that humanity has become aware of the problems of the modern urban industrial model and the urbanisation process that sustains life in the cities. Two critical books published in 1962 are seen as starting this questioning of our modern industrialized world and offering alternative solutions: The first is the lesser known, but more radical **Our Synthetic Environment** by Murray Bookchin³, followed by Rachel Carson's **Silent Spring**. Bookchin offered an initial deep systematic analysis of the problems and unsustainability of the wider industrial capitalist system, with the growth of the motorcar and suburbia urban model. Bookchin was concerned that the city man had "reached a degree of anonymity, social atomization, and spiritual isolation that is virtually unprecedented in human history" (BOOKCHIN, p. 98). Writing 2 years later in **Ecology and Revolutionary Thought**, Bookchin had found his solution, in Ecology, which "deals with the balance of nature. Inasmuch as nature includes man, the science basically deals with the harmonization of nature and man", adding later "it is impossible to achieve a harmonization of man and nature without creating a human community that lives in a lasting balance with its natural environment." (BOOKCHIN, 1964, p.3). He stayed working to create this harmonious balance for the remainder of his life, advocating **Social Ecology** and other radical political projects as pathways to get there. Writing a full half-century before the **Paris Agreement** Bookchin accurately predicted:

Today human parasitism disrupts more than the atmosphere, climate, water resources, soil, flora, and fauna of a region; it upsets virtually all the basic cycles of nature and threatens to undermine the stability of the environment on a worldwide scale... As an example of the scope of modern man's disruptive role, it has been estimated that the burning of fossil fuels (coal and oil) adds 600 million tons of carbon dioxide to the air annually, about 0.03 percent of the total atmospheric mass — this, I may add, aside from an incalculable quantity of toxicants. Since the Industrial Revolution, the overall atmospheric mass of carbon dioxide has increased by 13 percent over earlier, more stable, levels. It could be argued on very sound theoretical grounds that this growing blanket of carbon dioxide, by intercepting heat radiated from the earth into outer space, will lead to rising atmospheric temperatures, to a more violent circulation of air, to more destructive storm patterns, and eventually to a melting of the polar ice caps (possibly in two or three centuries), rising sea levels, and the inundation of vast land areas. (BOOKCHIN, 1964, p. 4)

³ Published under pseudonym "Lewis Herber" due to fear of retaliation, due to its political discourse.

The 1960's led to an explosion in social movements and revolutionary political moments around the planet, which included a new environmental awareness and search for a life more in balance in nature, which included intentional communities and Ecovillage projects and in 1973 the **Oil Crisis** forced critical rethinking about societies dependence on oil. The Club of Rome's **The Limits to Growth** (1972) outlined the limits of world growth patterns on a computer simulation which resulted in Lester Brown and others developing the initial concept of Sustainability which led to UN international environmental forums and finally the publication of the **Brundtland Report**⁶ in 1987 which proposed a model of Sustainable Development (SD), based on three main pillars of economic growth, environmental protection, and social equality. Also that year Richard Register published **Ecocity Berkeley: Building Cities for a Healthy Future**, credited with launching the Ecocity idea (ROSELAND 1997), which was followed by the First Ecocity Conference in Berkley, California in 1990.

The UN's **Earth Summit** happened in Rio de Janeiro in 1992, where **Agenda 21** was launched and where the **The Hannover Principles: Design for Sustainability** were presented, having been written by US architect William McDonough and German chemist Dr. Michael Braungart. They offered an initial template on how to create Sustainable Communities: 1) Insist on rights of humanity and nature to co-exist 2) Recognize interdependence 3) Respect relationships between spirit and matter 4) Accept responsibility for the consequences of design 5) Create safe objects of long-term value 6) Eliminate the concept of waste 7) Rely on natural energy flows 8) Understand the limitations of design 9) Seek constant improvement by the sharing of knowledge.

The First European Conference on Sustainable Cities and Towns took place at Aalborg, Denmark in May 1994 and led to the **Aalborg Charter**. This was followed in 1996 by the Lisbon conference and **Lisbon Action Plan**. The ICLEI⁷ network, which formed in 1990, has played a key role in facilitating these European meetings and offers a basic framework to support local and regional authorities striving for SD.

In 1995, British architect Richard Rogers delivered a 5 part series of lectures called **The Reith Lectures** focusing on the **Sustainable City**, which he developed in

⁶ Also referred to as **Our Common Future**

⁷ International Council for Local Environmental Initiatives, now: Local Governments for Sustainability

1997 into the seminal book **Cities For A Small Planet**. He celebrated cities as “the cradle of civilisation, a place for societies to come together and exchange ideas. Cities concentrate physical, intellectual and creative energy” and identified the essential problem “that cities have been viewed in instrumental or consumerist terms” (ROGERS, 1995). He outlined issues such as car dependence and growth of the suburbs as killing the heart of old cities, the ghettoization of areas, need for good cycling and public transportation infrastructure, the need to make lively multi use areas in the centre to bring life into the streets. He outlined that the challenge decision makers face was “to break with a system which treats technology and finance as a route to short-term profit rather than as a means to social and environmental ends”. Rogers served as Chief Advisor on Architecture and Urbanism to the Mayor of London from 2001-2009, when the C40 network was created.

By the end of the millennium, more authors were calling for Sustainable Cities: In 1999, Newman & Kenworthy launched their influential book at the White House: **Sustainability and Cities: Overcoming Automobile Dependence**, which tackled land use and planning codes relationship to an oil dependant urban model, by this time examples of Curitiba’s solutions were being noted for its public transport, Bus Rapid Transit (BRT) system and its strategies for Greening the urban landscape. O’Meara noted that “the struggle to achieve a sustainable balance between the Earth’s resource base and its human energy will be largely won or lost in the world’s cities” (1999, p.7), and identifies 6 key areas where changes needs to happen to make cities and the vast areas they affect more viable: water, waste, food, energy, transportation & land use. She identifies strong political engagement as a necessary tool: “Citizens, the ancient Athenians realized, are the best people to identify priorities for action in their own cities. If cities are to become more sustainable, people must take action in the neighbourhoods where they live” (1999, p.60).

Herbert Girardet (1999) advocated that Sustainable Cities needed dramatically reduced resource and energy consumption levels and argued that cities had changed dramatically due to fossil fuel dependence, that were running out. He advocated cleaner forms of energy production and more self-sufficient cities in terms of food production, jobs, economy and a return to localisation in public life and culture. Girardet’s perspectives were greatly influenced by the Buddhist economics of EF Schumacher and his classic 1973 text: **Small Is Beautiful: Economics as if People Mattered**. Soon, urbanists like Girardet began thinking beyond sustainability.

3.1.3 Beyond Sustainability to Resilience and Regeneration

At the turn of the millennium the concept of Sustainability seemed limited and inadequate, this led to incorporating newer concepts into the Urban Solutions toolkit. With environmental concern growing, the early years of the 21st century saw bold announcements of enormous new Ecocity projects in Asia, as well as many new initiatives to change the urban performance of existing communities, be they in cities or other urban settlements, by a range of actors, from National to Municipal governments, Social Movements, business leaders and various education bodies.

In 2002 the United Nations Environment Programme (UNEP), facilitated an international Charrette where the **Melbourne Principles for Sustainable Cities** (TABLE 1) were developed, to be adopted at the Local Government Session of the Earth Summit 2002 in Johannesburg, their preamble opened: “Cities are fundamental for economic opportunities and social interaction, as well as cultural and spiritual enrichment” (UNEP, 2002, p.2):

TABLE 1 – MELBOURNE PRINCIPLES FOR SUSTAINABLE CITIES

#	PRINCIPLE
1	Provide a long-term vision for cities based on: sustainability; intergenerational, social, economic and political equity; and their individuality.
2	Achieve long-term economic and social security.
3	Recognise the intrinsic value of biodiversity and natural ecosystems, and protect and restore them.
4	Enable communities to minimise their ecological footprint.
5	Build on the characteristics of ecosystems in the development and nurturing of healthy and sustainable cities.
6	Recognise and build on the distinctive characteristics of cities, including their human and cultural values, history and natural systems.
7	Empower people and foster participation.
8	Expand and enable cooperative networks to work towards a common, sustainable future.
9	Promote sustainable production and consumption, through appropriate use of environmentally sound technologies and effective demand management.
10	Enable continual improvement, based on accountability, transparency and good governance.

SOURCE: MELBOURNE PRINCIPLES FOR SUSTAINABLE CITIES, (UNEP, 2002)

McDonough & Braungart’s 2002 essay **Buildings Like Trees, Cities Like Forests** acted as a counterpoint to the industrial age “mass production spirit” attitude of Le Corbusier, for whom: “the city was “a human operation directed against nature” and the house was “a machine for living in”. Instead, their hoped for buildings and cities were based on design principles inspired by nature’s laws, which participate in the landscape:

But what if buildings were alive? What if our homes and workplaces were like trees, living organisms participating productively in their surroundings? Imagine a building, enmeshed in the landscape, that harvests the energy of the sun, sequesters carbon and makes oxygen. Imagine on-site wetlands and botanical gardens recovering nutrients from circulating water. Fresh air, flowering plants, and daylight everywhere. Beauty and comfort for every inhabitant. A roof covered in soil and sedum to absorb the falling rain. Birds nesting and feeding in the building's verdant footprint. In short, a life-support system in harmony with energy flows, human souls, and other living things. Hardly a machine at all. (MCDONOUGH & BRAUNGART, 2002)

Their essay included three “Human Leaf” building principles: 1) Waste=Food 2) Use current solar income 3) Celebrate diversity. The first led to their **Cradle to Cradle** design process to eliminate waste completely, by constructing things so that they can be broken up after use into technical and biological nutrients to be re-entered into circular cycles. By 2005, McDonough was being commissioned to build 12 ecocities for the Chinese government, with very ambitious plans (2005): Urban design based on hydrology, ancient biota winds and sun. Everybody gets fresh air, fresh water and direct sunlight in every single apartment at some point during the day. Parks laid out as ecological infrastructure. Building areas include commercial and mixed use so people have centres and places to be, including 24-hour street. Everybody's within a five-minute walk of transportation. Connected municipal waste systems collects and sends human faeces to sewage treatment plants and fertilizer factory that makes natural gas which fuels the cities cookers. Wastewaters sent to wetlands for habitat restorations. Organic compost is all taken back to the roofs of the city for farming. Solar power is collected on roofs of factory and industrial zones to power the city.

To mark the moment when humanity moved from the urban to the rural, what is seen as the Olympics of architecture, the Venice Biennale's 2006 exhibition explored **Cities, Architecture & Society**, to which many countries responses were based on some of McDonough's ideas like use of roof space as food production zone or public space. In 2008 there was the financial crash, which sparked an economic crisis in many regions, with countries in Southern Europe being hit most, this forced a more critical dialogue in certain sectors.

While the Brundtland Report is credited with the popularizing the idea of SD, which “meets the needs of the present without compromising the ability of future generations to meet their own needs” (1987), many felt the concept did not go far enough, including the Permaculture (PC) community, which grew from Holmgren &

Mollison's design concept developed in 1978, that quickly grew into a global movement due to Mollison's multiplier effect of teaching his Permaculture Design Course (PDC) and encouraging graduates to become teachers themselves and set up their own institutes and demonstration sites. Holmgren believed Permaculture design principles could provide a framework "to move beyond the limited successes of sustainable development to a reunion of culture and nature" (Holmgren, 2002). PC is short for "permanent agriculture", but the idea grew to stand for "permanent culture", which incorporated all forms of modern life. It is a design process, whose 3 core tenets are: 1) Care for the earth: 2) Care for the people: 3) Return of surplus. By 2004 Rob Hopkins was teaching PC in Kinsale, Ireland, and exploring community solutions to the problems of Peak Oil. Together with his students, they developed the first Energy Descent Action Plan (EDAP), a pathway to reduce dependence on cheap oil and other fossil fuels while increasing community resilience. In 2006 Hopkins moved to Totnes, England and developed these ideas into the Transition Towns (TT) model, which grew rapidly and became a "viral" global movement (HOPKINS, 2009) with local different sized initiatives in countries all around the planet. The concept of resilience emerged from within the ecological sciences, it is defined as:

The capacity of a system to absorb disturbance and reorganise while undergoing change, so as to retain essentially the same function, structure, identity and feedbacks (WALKER ET AL. 2004)

Hopkins states (2009): "the idea of resilience is a more useful concept than the idea of sustainability" because it is a fuller response to the two challenges "referred to as the "Hydrocarbon Twins" of Climate Change and Peak Oil":

Sustainability and its oxymoronic offspring sustainable development are commonly held to be a sufficient response to the scale of the climate challenge we face: to reduce the inputs at one end of the globalised economic growth model (energy, resources, and so on) while reducing the outputs at the other end (pollution, carbon emissions, etc.). However, responses to climate change that do not also address the imminent, or quite possibly already passed, peak in world oil production do not adequately address the nature of the challenge we face. (HOPKINS, 2009)

Newman has also built on his earlier work on Sustainable Cities (1999) to include the newer theme of Resilience, based on "Hope over fear" (BEATLEY, BOYER, NEWMAN, 2009). Acknowledging much early thinking developed after the natural disasters of the 2004 Indian Ocean Tsunami and Hurricane Katrina that

destroyed New Orleans in 2005, the authors “have focused on the idea of resilient cities as those that can substantially reduce their dependence on petroleum fuels in ways that are socially and economically acceptable and feasible”, and that their urban strategies “need to involve all parts of the community – government, business, professional, practitioners, community groups, and individual households”. Beatley includes **The Biophilic City** (2010) idea that integrates nature into Urban Design by cherishing the natural features that already exist but also works to restore and repair what has been lost or degraded. Wilson (1984) popularized the biophilia idea that means, “love of life or living systems”. Heinberg’s **Power Down** (2004) and **Peak Everything** (2007), and Campbell’s **The Truth about Oil and the Looming Energy Crisis** (1988) popularized the Peak Oil concept, based on Hubbert’s peak theory for oil production, from his 1956 paper. Which along with Climate Change, Hopkins refers to as “The two great oversights of our times” (HOPKINS, 2008 p.12).

In 2010 the ICLEI network launched **Resilient Cities**, a series of annual global forums on urban resilience and adaptation, they claim to impact “over 25% of the global urban population” (ICLEI website) and their current goal is “to support cities to become low-carbon, resilient, biodiverse, resource-efficient, and to green their infrastructure and urban economy”. In 2013, **100 Resilient Cities** (100RC)¹¹ formed in 100 selected cities throughout the world, they are dedicated to “helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century” by: 1) Financial and logistical guidance for establishing an innovative new position in city government, a Chief Resilience Officer, who will lead the city’s resilience efforts; 2) Expert support for development of a robust resilience building strategy; 3) Access to solutions, service providers, and partners from the private, public and NGO sectors who can help them develop and implement their resilience strategies; and 4) Membership in a global network of member cities who can learn from and help each other.

Girardet moved beyond his **Sustainable Cities** (1999) ideas to **The Regenerative City** (2014) idea which, like Hopkins and Newman, included resilient responses to climate change and peak oil, advocating the compact city model over oil dependant suburbia, with local food production and proximity to the centre playing

¹¹ 100RC is an independent non-profit organization that provides governance and operational infrastructure to its sponsored projects, financially supported by The Rockefeller Foundation and managed as a sponsored project by Rockefeller Philanthropy Advisors (RPA)

a major part of what he labels *Ecopolis* (IMAGE 3), which differs from the current urban model, which he labels *Petropolis*. Girardet went against his earlier terminology from 1999 regarding Sustainable Cities, arguing that sustaining something that is broken is not enough. He recognized the huge damage that had been done to urban landscapes and outlined that the new eco urban model must fix the city, in terms of: improved soil qualities with plant nutrients and carbon returned, river networks and atmosphere. His viewpoint is a holistic one, as he outlined:

To assure that they (cities) do not just become resource-efficient and low-carbon-emitting, but that they positively enhance rather than undermine the ecosystem services they receive from beyond their boundaries... To develop comprehensive political, financial, and technical strategies to assure a restorative relationship between cities and the ecosystems from which they draw resources for their sustenance. (GIRARDET, 2014)

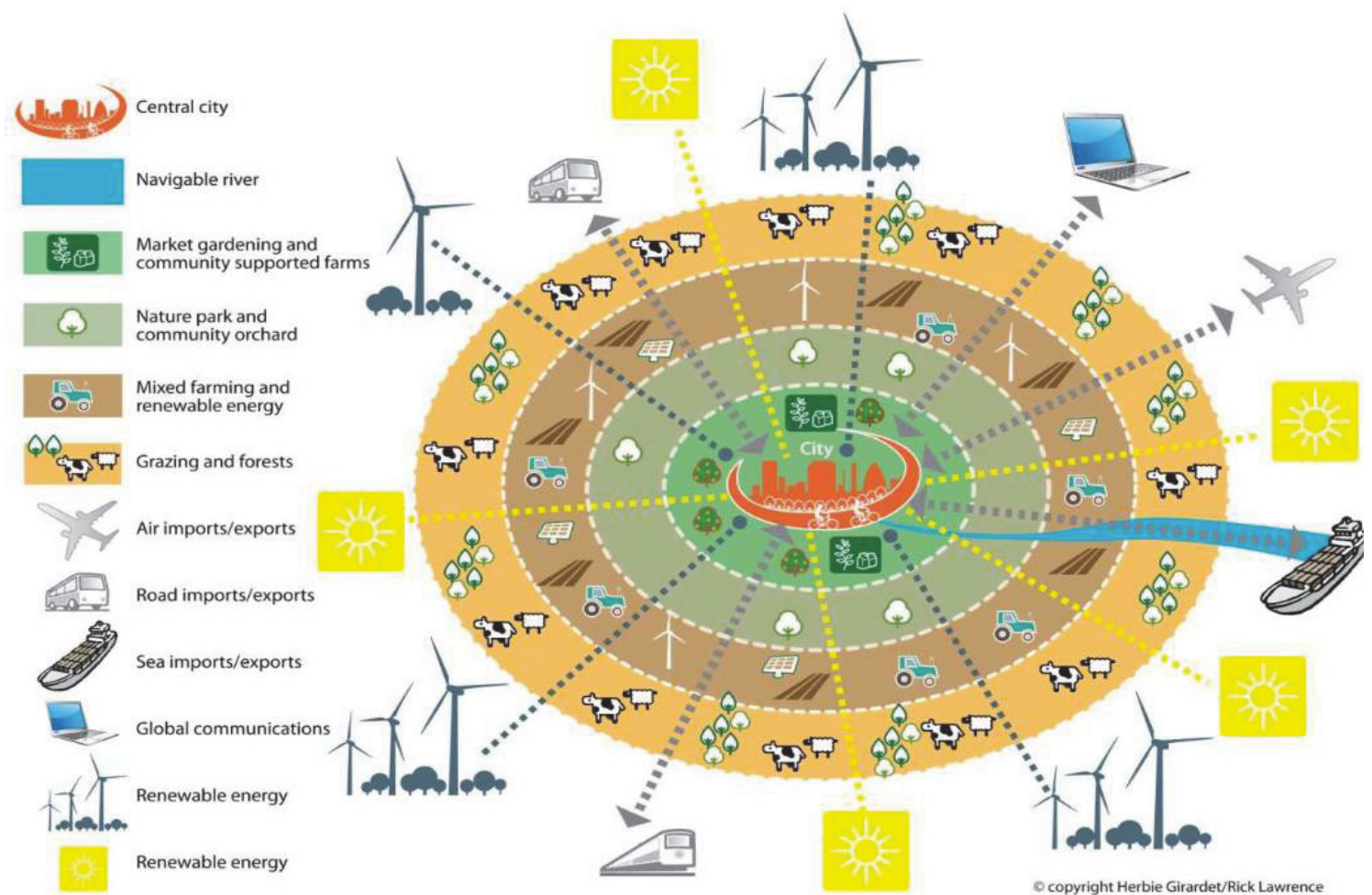


IMAGE 3 – THE REGENERATIVE CITY MODEL: ECOPOLIS
SOURCE: GIRARDET / RICK LAWRENCE, (2014).

Food production and distribution is a critical part of the resilient / regenerative city, in regard to systems that use less oil in both the production process (agrototoxic non-organic fertilizers which destroy soils) and transport system (lowering the food miles, the fuel required to move the foods from the field to the plate) Hopkins (2008) and Girardet (2014) look at Cuba as an example of what happens when a society is confronted by Peak Oil. With the demise of the Soviet Union, Cuba's oil levels were radically reduced which resulted in major urban shifts, one of which was a massive increase in a programme of urban agriculture, which was supported and assisted by Australian PC activists. Roof areas were converted into farms, open spaces were turned into community gardens and a network of informal and decentralized economic markets sprung up organically. Health levels improved due to citizens cycling and climbing stairs. Cuba's urban transformation inspired UK architects Katrin Bohn & André Viljoen to develop the Continuous Productive Urban Landscapes (CPUL) model in 2005, for linear food production strips in modern cities, using derelict spaces, coupled with community areas, as base for Sustainable Cities. They designed plans for London that inspired similar local eco urban food farming projects, such as Dublin, Ireland (2005). In 2007, they were invited by Middlesbrough city council to participate in the **Designs of the Time (DOTT 07) Middlesbrough Urban Farming Project** (IMAGE 4). This yearlong series of community projects in the large North East of England post-industrial town (Current Population: 174,700) "explored how design can improve our lives in meaningful ways". The architects analysed the city, mapped it and proposed a CPUL design, with 80 locations becoming productive growing points across the city. A subsequent report in a UK paper outlined the success of this deeply collaborative and educational food project:

All over the town, disused urban spaces were turned into fertile corners bursting with freshly grown fruit and vegetables as more than 1,000 residents took part in a project aimed at changing the way they think about food. The idea of the urban farming project was to make people more aware of food miles, improve health and aid regeneration of the borough, which contains the ninth most deprived area in the UK. Groundwork South Tees advised schools, mental health hospitals, residential care homes and retailers on planting and growing many varieties of herbs, vegetables and fruit. Containers of different sizes were used so people could cultivate whatever space they had. Middlesbrough borough council turned over parkland, town-centre planters and other landholdings for fruit and vegetable growing. The eight-month project culminated in a town meal outside the Middlesbrough Institute of Modern Art, where up to 8,000 people shared meals from the food that had been grown. (EARLY, 2008)



IMAGE 4 – A GREEN AND EDIBLE MIDDLESBROUGH, CPUL PROPOSAL
SOURCE: VILJOEN & BOHN, DOTT 07 / MIDDLESBROUGH COUNCIL (2007) AUTHORS
ARRANGEMENT & LEGEND

Resilience thinking has now become a critical component of urban thinking, thanks to development of theory and practice from actors from the worlds of PC, TT and others. Resilience now challenges what was the position of Sustainability, but much current terminology used by government policy and civil society groups still focuses only on SD, so we seem to be at a crossroads. This resulted in the inclusion of both terms in 2015 for goal number 11 of the UNs 17 Sustainable Development Goals (SDGs) **To make cities Inclusive, Safe, Resilient and Sustainable**, of the UNs **Transforming our world: the 2030 Agenda for Sustainable Development**, which was adopted by National governments at the UN's Sustainable Development Summit in 2015 in New York, and which formed basis of the **New Urban Agenda** (NUA) that was launched by the UN in 2016 at **Habitat III** (HAB3), in Quito, Ecuador, which "is a roadmap for building cities that can serve as engines of prosperity and centres of cultural and social well-being while protecting the environment" (UN, 2016).

The 2030 Agenda for SD recognizes "that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development" (UN, 2015), with the SDGs stimulating action over the next 15 years in areas of critical importance for humanity and the planet, the UN recognizes the size of this "great collective journey", but they pledge that "no one will be left behind". Revi (2016) notes:

Even though sustainable cities (SDG 11) is only one of 17 SDGs, the global discussion around the New Urban Agenda (NUA) of Habitat III has made it moderately clear that most of the other SDGs will never be achieved without sustainable urbanisation, and vice versa.

NUA is a new model of urban development to integrate all facets of SD to promote equity, welfare and shared prosperity (UN, 2016), a 20 year SD strategy, adopted by 167 countries in 2016, with calls on world's cities to adopt NUA principles at the local level via their municipal councils. Regarding the commitment to eradicate poverty, Ecuador's President Correa noted NUA was "for the first time calling on the voice of the South". Revi (2016, p.xii) notes that NUA is a UN document based on previous ones, which embraces a plethora of commitments and processes suggested by dozens of past declarations, conferences and summits, an urban wish list with over 150 clauses, that so far has failed to define a clear set of goals, targets and

follow-up actions and offers no financing mechanisms or allocation of responsibilities for implementation.

Much important work on resilience is happening today in the ecovillage communities, which are an integral part of the TT and PC worlds. For decades they have been building communities, experimenting, learning and critically facilitating community processes. In recent years their network has significantly grown, moving from almost disconnected isolated entities to becoming cutting edge projects which now include some urban communities and city districts. We now explore how future Sustainable Cities projects could incorporate, or build on their work: Scaling up from Ecovillages to Ecocities, while incorporating all of the objectives of the NUA and SDGs. To explore how this could merge with current Sustainable Cities thinking, we need to firstly explore positive and negative Ecocity developments in recent years.

3.1.4 The question of Ecocities

As has been well documented, efforts to render cities environmentally and socially sustainable are not new (JOSS, 2009) but the term “eco-city”¹² became popular in the 1970’s (ROSELAND, 1997) and was first noted academically by Richard Register’s 1987 book, **Ecocity Berkeley: Building Cities for a Healthy Future**, followed by the first International Ecocity Conference in 1990 at Berkeley. During the 1980s and early 1990s, the eco-city concept remained largely open to interpretation both in terms of definition and focus (CAPROTTI, 2015), with the ‘eco-city’ concept remaining “a collection of ideas and propositions about sustainable urban planning, transportation, housing, public participation and social justice, with practical examples relatively few and far between” (JOSS, 2009, p.239), Curitiba was included in this early wave of Ecocity and sustainable urbanism examples. In the mid 2000s things quickly changed:

The phenomenon appears to have become increasingly global and mainstream, against the background of the international recognition of the scale and severity of climate change and rapid urbanisation, particularly in the developing world... with countries and cities competing to take a lead in developing and applying new socio-technological innovations and thus bringing about the next generation of sustainable towns and cities. (JOSS, 2009, p.240).

¹² Different authors use different spellings; Eco City and Eco-City. Unless direct quote or title, this dissertation uses Ecocity

Joss's 2009 study mapped, analysed and compared some 79 identified eco-city initiatives and identified three broad eco-city categories that encompass most current eco-city developments: (1) new-build eco-cities, (2) the retro-fitting of existing urban environments and (3) the expansion of existing urban areas. The two grandest Ecocity projects that were boldly announced as heralding a new age for urbanism were Dongtan in China (announced 2003, launched 2005) and Masdar City in Abu Dhabi, (launched 2006). Sze (2015) notes how these projects were motivated by financial and political gain and supported by elite power structures in the UK, China and Abu Dhabi. Both projects had British design groups: Arup for Dongtan, Norman Foster for Masdar City and both turned out to be spectacular failures (POW & NEO, 2010; CUGURULLO, 2013).

China announced in 2001 that its goal was to build 400 new cities of 1 million inhabitants each by 2020, or 20 new cities a year for 20 years (MARS, 2008) with Dongtan being the flagship, Sze notes Arup's description: "Dongtan represents the quest to create a new world". It was planned on an ecologically sensitive wetlands island near Shanghai, to open in 2010 with accommodation for 10,000, and be one-third the size of Manhattan by 2050 with a population of half a million. The project ran into difficulties and no construction has taken place yet. Sze later added: "The desires that Dongtan represents are those of green or sustainable capitalist discourse, which suggests that capitalist means are the best solution to environmental problems" (SZE & ZHOU, 2011, p.218).

In 2006, the government of Abu Dhabi, the largest and most oil rich of the United Arab Emirates (UAE), announced that it intended to spend \$22 billion to build a new eco-city to house 40,000 residents, which would rely entirely on solar energy and other renewable energy sources. To date, very little has been built and much is on hold. Cugurullo (2013) argues that Sustainability is not the real aim of Masdar and that the image of the ideal sustainable city was used to boost the local economy and fulfil the political interests of the ruling class. He labelled the project, and others like it: **Frankenstein cities** (2016), an example of "(de)composed urbanism", a metaphor for experiments generated by forced union of different, decaying parts, to form "a patchwork" of different pieces of urban fabric produced by different clean-tech projects" (CUGURULLO, 2016, chapter 14).

Cugurullo (2013), Sze (2015) and Caprotti (2015) all question what type of life and citizen is being welcomed, or invited, to these new ecocities and argue that

the developments are not affordable. Johnson (2013) is also critical of this recent wave of ecocity development, calling it Cyburbia (Cyborg and Suburbia), exclusive and smart, but ultimately a non-resilient city:

If you look at these “ecocities”, a lot of them have been set up as this gilded speedboat city, that a few rich people jump into to escape the sinking titanic of the megacity. As the big city goes down, rather than trying to solve its problems, they get into this gated community, a gilded city for a few. (JOHNSON, 2015)

Turning to the latest flagship project of Chinese eco-urbanism; Tianjin eco-city, outside China’s fourth largest city Tianjin, Caprotti (2015) asks the critical question: **‘Eco’ for whom?**, exploring “whether Tianjin eco-city will become, like Masdar, a non-place (Cugurullo, 2013) characterized by grand corporate urban planning and environmental-economic visions, but devoid of an organic society- a city stillborn” (CAPROTTI, 2015, p.19). His findings point to the creation of modern apartments as bubbles or containers for eco living, disconnected from the public realm and void of a sustainable, socially resilient community in the eco-city, with much of the process of construction based on the marketing of a lifestyle (few can afford) as much as a programme that seeks to positively affect the environment. The projects levels of artificialness went as far as fake leaves being tied onto a whole avenue of bare trees, which “seemed to point metaphorically to the strained marketing of a ‘harmonious’ and ‘ecologically friendly’ city as an artificial and ultimately misleading foil for yet another new-build luxury residential project” (CAPROTTI, 2015, p.16).

In 1992 Register founded the non-profit group Ecocity Builders, for whom the Ecocity was an “ecologically healthy city”, they run a biannual Global conference. In 2010 they launched the International Ecocity Framework and Standards (IEFS), which works with an international committee of expert advisors. Together in 2010, in Vancouver Canada, IEFS adopted the following description for an Ecocity:

An Ecocity is a human settlement modelled on the self sustaining resilient structure and function of natural ecosystems. The ecocity provides healthy abundance to its inhabitants without consuming more (renewable) resources than it produces, without producing more waste than it can assimilate, and without being toxic to itself or neighbouring ecosystems. Its inhabitants’ ecological impact reflect planetary supportive lifestyles; its social order reflects fundamental principles of fairness, justice and reasonable equity.

While the Ecocity concept has gone through different stages, the recent ones in China and UAE of mega top down exclusive projects, have not been successful. Ecocity projects that engage with all cities and communities, and not just the privileged exclusive few, seem more aligned to the hopes of SDGs, NUA and Sustainable Cities. A logical step would be the scaling up of best practice from the ecovillage world, specifically the main group **Global Ecovillage Network** (GEN). We will now look at where their ideas have come from, where they are attempting to get to, and how, with all peoples of the planet.

3.1.4.1 From Ecovillages to Ecocities

After the horrors of World War 1 a worldwide peace movement developed in Europe, related to this was the formation of intentional communities around Europe. In Germany, many were based on leftist, anarchist or communist philosophies:

They were mostly rural settlements, usually trying to get away from the war torn capitalist system, live a natural life, and achieve some form of self-sufficiency. They were often also an attempt to heal the earth after the mass destruction caused by the war. (IC website, 2017)

The 1960s and 1970s saw great changes in Western Society, one aspect of which was more utopian experiments in cohousing and related alternative-community movements, including more intentional community and Ecovillage projects. Gaia Trust is a Danish-based charitable association founded in 1987 to “support the transition to a sustainable and more spiritual future society”, they funded an “Ecovillages and Sustainable Communities” study in 1991 that found that although many interesting ecovillage projects existed, the full-scale ideal ecovillage did not yet exist. Robert Gilman developed the ecovillage definition in the late 1980s that became a standard for many years:

Human-scale full-featured settlement in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development, and can be successfully continued into the indefinite future. (GILMAN, 1991)

In 1991 the Gaia Trust convened a meeting in Denmark of representatives of eco-communities to discuss strategies for further developing the ecovillage concept. Gaia Trust co founder, Ross Jackson outlined the truly global aspect of the network:

In the 1960s several spiritually based projects were initiated in different parts of the globe: Findhorn in Scotland, The Farm in Tennessee, USA, Sarvodaya in Sri Lanka, and the NAAM movement in Burkino Faso. Solheimer in Iceland has roots going all the way back to 1930. A major impulse came from the Indian philosopher and sage Sri Aurobindo and his French counterpart The Mother, who put forth the vision of Auroville in India in 1968. (JACKSON, 2004).

In 1995 the first international conference of the evolving informal ecovillage network was organised at Findhorn ecovillage in Scotland, entitled **Ecovillages and Sustainable Communities for the 21st Century**, Jackson stated (PAIS, 2015):

The conference was attended by over 400 people from forty countries, while another 300 who wished to be there had to be turned away. It was clear that the ecovillage concept had hit a sensitive nerve with a lot of people.

Immediately following this meeting, 20 people from different ecovillages met for five days and formally established the **Global Ecovillage Network (GEN)** in 1995. By 2001, GEN had obtained consultative status at the United Nations Economic and Social Council (ECOSOC), their subsequent vision has continually informed ideas about true SD. May East, a Brazilian woman living in Findhorn, has been advising UN groups along GEN principles since and they were included in NUA discussions. Former GEN president, Jonathan Dawson (2006) outlined 5 ecovillage principles in his book **Ecovillages: New Frontiers for Sustainability** (TABLE 2)

TABLE 2 – DAWSONS ECOVILLAGE PRINCIPLES 2006

#	PRINCIPLE
1	They are not government-sponsored projects, but grassroots initiatives.
2	Their residents value and practice community living.
3	Their residents are not overly dependent on government, corporate or other centralized sources for water, food, shelter, power and other basic necessities. Rather, they attempt to provide these resources themselves.
4	Their residents have a strong sense of shared values, often characterized in spiritual terms.
5	They often serve as research and demonstration sites, offering educational experiences for others.

SOURCE: DAWSON, 2006. DEVELOPED BY AUTHOR

Current GEN Director Kosha Joubert further developed the Ecovillage concept in 2017 to highlight it could include urban communities:

Intentional, traditional; rural or urban community that is consciously designed through locally owned, participatory processes in all four dimensions of sustainability (social, culture, ecology and economy) to regenerate their social and natural environments (JOUBERT, 2017)

From the beginning, GEN planned an education project (TABLE 3): “GEN’s second goal was to create global services, like an education network... We are only now getting to this point in the spring of 2004 of creating a global educational network and a common educational curriculum” (JACKSON, 2004). This process led to the creation of the network of **Global Ecovillage Educators for a Sustainable Earth (GEESE)**, who formulated a transdisciplinary approach to education for sustainability. Their programme **Gaia Education Design for Sustainability (GEDS)** was formally launched in October 2005 at Findhorn, at the GEN+10 Conference, it consisted of four dimensions of sustainability: Social, Ecological, Economic & Worldview. “GEN and Gaia Education have worked very closely together, but as two separate entities. The first “product” was a four week course called Ecovillage Design Education (EDE), which continues to be taught all over the world” (PAIS, 2015).

TABLE 3 – DEVELOPMENTS OF GAIA EDUCATION DESIGN FOR SUSTAINABILITY (GEDS)

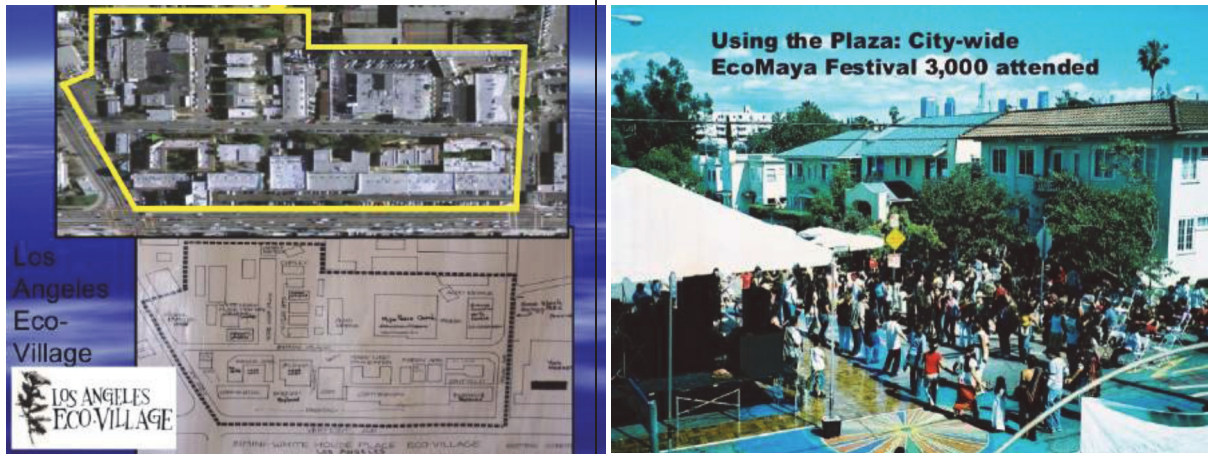
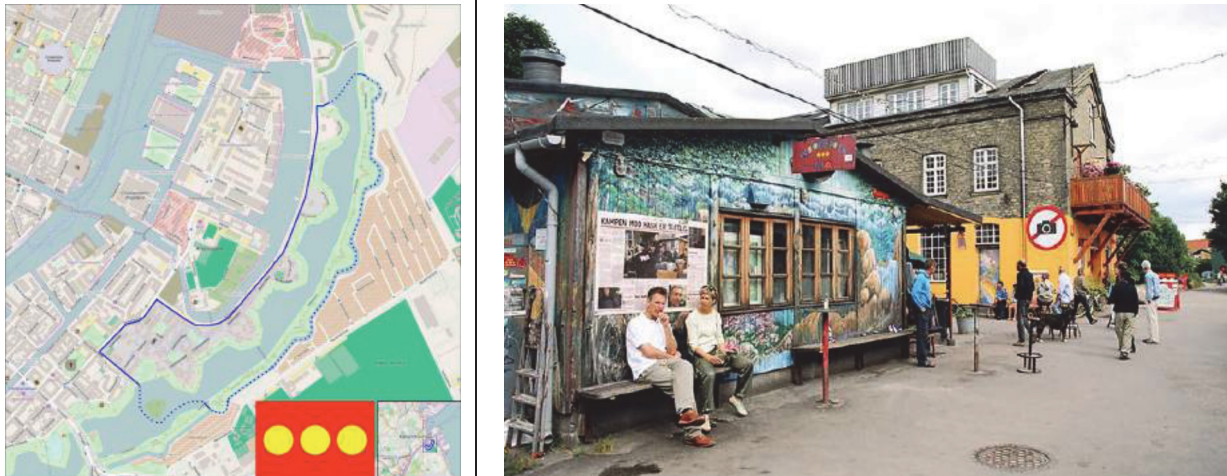
YEAR	DEVELOPMENTS
1998	The GEESE first met in 1998 in Fjorvang, Denmark where the common ground for the development of the ecovillage design curriculum was established.
2005	Ecovillage Design Education innovative curriculum launched during 10th anniversary conference of the Global Ecovillage Network at the Findhorn Ecovillage
2008	Gaia Education Design for Sustainability (GEDS) online programme launched in partnership with Open University of Catalonia (UOC). Initially offered in Spanish and English, the course attracted students from both developed and developing countries, on all five continents.
2011	GEDS became a formal postgraduate course, attracting mostly Spanish and Latin American students.
2013	Gaia Education started to offer GEDS in Portuguese, in its online learning platform, where it has also been possible to take the GEDS course in English since 2014.
2014	Gaia Education developed the new stream of activity Project-Based Learning, supporting community-led implementation of the Sustainable Development Goals.
2015	GEDS postgraduate Spanish course converted into a Masters degree in collaboration with the Open University of Catalonia (UOC): Integrated Systems Design for Sustainability

SOURCE: DEVELOPED BY AUTHOR, BASED ON GAIA EDUCATION INFO FROM SITE

“Today, GEN reaches out to around 10.000 communities on all continents. We have learned that, while there is no one way of being an ecovillage, there are three core practices shared by all” (JOUBERT, 2017) (IMAGE 6): 1) Being rooted in local participatory processes 2) Integrating social, cultural, economic and ecological dimensions in a whole systems approach to sustainability 3) Actively restoring and regenerating their social and natural environments. 2 GEN projects are in urban districts and of particular interest, perhaps offering insights into how future ecocities might be organised, both are classified urban rejuvenation projects, both have an

inherently political component: Los Angeles EcoVillage, (LAEV) in the US and Christiania in Copenhagen, Denmark (TABLE 4):

TABLE 4 – 2 GLOBAL ECOVILLAGE NETWORK URBAN DISTRICTS

NAME	AREA	YEAR STARTED + RELEVANT INFO
LOCATION	INHABITANTS	
Los Angeles EcoVillage (LAEV)	2 block neighbourhood (About 11 acres)	1993 - Space includes cooperative affordable housing, native landscape, on-site food growth, micro social enterprises, a community land trust, pedestrian-friendly streetscape, bike-friendly amenities, and a host of democratic community-building activities.
Near Koreatown, L.A. USA	30 - 40 intentional community members	
		
Christiania	4 hectares (84 acres)	1971 - Squatted old army barracks and surrounding lands in old military complex. Despite varying conflicts with the municipality, allowed to continue as a cultural experiment. Has experienced gang & police violence.
Copenhagen city centre. Denmark	About 850 residents.	
		

SOURCE: DEVELOPED BY THE AUTHOR (2017)

LAEV exists in inner city L.A. and was created in 1993, a year after the 1992 riots after the Rodney King verdict, with the core group thinking of creating the project since the late 1980's. A two block neighbourhood (about 11 acres) that

demonstrates processes for achieving lower environmental impacts while raising the quality of community life, LAEV is located in the north end of Wilshire Center / Koreatown and consists of 30 to 40 intentional community members, who “envision changing the way we live in the city and strive to inspire others to make more rapid and deeper changes in their living patterns, as well” (LAEV, 2017). The space includes cooperative affordable housing, native landscape, on-site food growth, micro social enterprises, a community land trust, pedestrian-friendly streetscape, bike-friendly amenities, and a host of democratic community-building activities.

Christiania is a somewhat controversial project. Also known as Freetown Christiania, it is a self-proclaimed autonomous neighbourhood of about 850 residents, covering 34 hectares (84 acres) in the borough of Christianshavn in the Danish capital city of Copenhagen. It is in the city centre, in a large old army barracks along the old city wall. The area was abandoned and in 1971 inhabitants of the surrounding neighbourhood broke down the fence to take over parts of the unused area as a playground for their children. Squatters and activists moved in and on 26 September 1971, Christiania was declared open by Jacob Ludvigsen. In contrast to the site's previous military use, the spirit of Christiania grew out of the hippie movement, the squatter movement, collectivism and anarchism. The community organised using consensus to make decisions and 9 rules were formed since the start, including no firearms, no heavy drugs, no biker gangs. Soft drugs were permitted and it had a cannabis trade that was tolerated by authorities until 2004, it has seen conflicts, riots, police raids, gang violence, a grenade attack, shootings and a murder. Despite varying conflicts with the municipality, the project was allowed to continue as a cultural experiment. Christiania's flag is a red banner with three yellow discs representing the dots in the "i"s in "Christiania", and their anthem translates as “You cannot kill us”. GEN co hosted the **Windows of Hope** conference here in 2009.

Newman & Jennings (2008) have identified the GEN experiments, referencing to both LAEV and Christiania as possible solutions in **Cities as Sustainable Ecosystems: Principles and Practices** and state that the **Urban Ecovillage Network** has emerged recently in North America, applying GEN's concepts to cities, engaging “urban neighbourhoods throughout the world in the process of reinventing how we live in cities, to be more ecologically, economically and culturally sustainable” (NEWMAN & JENNINGS, 2008 p.179). The TT model has a Cities Hub network and includes urban neighbourhoods like Brixton in its network. In Brazil the *EcoBairro*

(Eco neighbourhood) project exists in São Paulo. Co-founder Lara Freitas (2016) suggests the urban district of Vauban in Freiburg, Germany is a model that can be replicated in other countries. Perhaps future Ecocity projects could be based around the aims and methodology developed by GEN over recent decades:

SDG11 aims to make all cities and human settlements inclusive, safe, resilient and sustainable by 2030. Within GEN, we say that every village needs to become an ecovillage and every city a green city. In order to achieve these goals, the ecovillage approach needs to be dramatically scaled up without losing its core values of being locally owned, participatory processes. (JOUBERT, 2017)

More examples of fully built ecological districts exist which are not currently part of the GEN network, as well as a range of eco neighbourhood projects, at varying stages of development, including in Brazil. Perhaps these can be the next urban districts to become part of GENs global network. Freitas (2016) listed principal eco neighbourhood projects (TABLE 5) as the following:

TABLE 5 – CURRENT PRINCIPAL ECO NEIGHBOURHOOD PROJECTS

PROJECT – NEIGHBOURHOOD – CITY - COUNTRY	ESTIMATED POPULATION	LIVING UNITS	SIZE (HECTARES)
Bedzed – Beddington – UK	244	82	1,7
Bo01 – Malmo – Sweden	10 k	800	12
Vesterbo – Copenhagen - Denmark	34 k	4 k	35
Vauban – Freiburg – Germany	3,6	420	38
Kronsberg – Hannover – Germany	15 k	6 k	70
Hammarby Sjostad – Stockholm – Sweden	30 k	8 k	200
Eco Viikki – Helsinki – Finland	2 k	-	23
EVA – Lanxmeer – Culemborg – Holland	-	250	24

SOURCE: FREITES (2016) – QUARTIER DURABLE (2005 APUD RIBEIRO, 2014)

This scaling up of GENs structure seems like a logical step toward creating more Sustainable Cities, or Ecocities, and there are examples of what buildings and urban areas would look like and how they would function, but perhaps the hardest part is figuring out how the human side would work: A network of communities within communities, a federation of clusters of ecological neighbourhoods, communicating with each other, organizing horizontally and vertically through local assemblies. All autonomous and local, but at the same time, all nodes within a global network. Such structures already exist in Communalist projects and also in local neighbourhood assemblies in Barcelona. We will now examine these areas in the following section.

3.2 CITIZEN PARTICIPATION

This section explores aspects of Citizen Participation (CP) in the creation of sustainable urban communities. The issues are explored mostly in a general sense in cities and communities globally, but the final part deals with events currently happening in one specific city. To begin with, a brief overview is given of the development of increased ability for citizens to engage with and participate in local systems so as to affect the world around them, mostly speaking this happens in different spheres of the political realm. **The Birth of Modernity and an increasingly Participative World** (2.2.1) examines key moments from the “Birth of Democracy” in Athens 2,500 years ago to the “Birth of Modernity” in the revolutionary streets of Paris in 1789. It tries to develop a basic understanding of the complex framework on which movements today are built; Increased equality for all sexes and races, dynamics that gave rise to Capitalism and the consequences, and the appearance of the industrial age which unleashed the great ecological changes, to which we are attempting to find solutions today. **Structures and Dynamics of Citizen Participation** (2.2.2) is divided into 2 parts. The Structures section explores current theory about what does Citizen Participation mean today, exploring different structures and processes by which citizens can actively shape the world around them. Followed by the Dynamics section, which takes a closer look at often overlooked, smaller scale issues that can be seen as the real difference as to why some projects and movements work, while others don’t. While previous sections deal with things from a more general sense, this section looks at things from the individual’s perspective, why they spend so much time with a project or movement. **Responses to Today’s Global Crises** (2.2.3) examines the core issues responsible for where humanity finds itself today; possible global collapse, as a result of the current economic and political system that governs humankind today, global Capitalism. The section explores the advocates that argue that for humanities survival a break needs to be made from this system and explores alternative pathways being suggested, all of which can only be achieved by greater citizen participation. The chief proposals made by Murray Bookchin are investigated; Communalism, Social Ecology and Municipalist structures for towns and cities. **The Right to the City and Urban Revolts in the Network Age** (2.2.4) goes into greater detail of the role of the city as the ideal place for required societal change. It also

explores the critical role that changing technology has played, in assisting the evolution of these movements and new strategies employed. **Municipalist solutions and Rebel Cities** (2.2.5) examines some of the most exciting urban municipalist experiments currently underway, which are happening in Spain. Where citizens firstly fought for greater participation in city affairs, the *Spanish Revolution* of 2011, and secondly won control in 2015 of the Municipalist institutions of 8 *Rebel Cities*. This section looks at various aspects of what happened and is still happening in Barcelona city, especially examining issues of communication, to understand why and how such a project is successful. Exploring what their call for a Feminist Democratic Revolution means, the section finishes looking at how the city is inspiring similar projects in more cities around the world and helping develop a global Municipalist network, which including activists and cities in Brazil.

3.2.1 The Birth of Modernity and an increasingly Participative World

The idea of democracy is about 2,500 years old, first appearing in ancient Greek political and philosophical thought in the city-state of Athens about 508 BC, as facilitated by "the father of Athenian democracy", the Athenian lawgiver Cleisthenes (DUNN, 1994). The word comes from *demos* (common people) and *kratos* (strength) and denotes "rule of the people". Bookchin notes:

Politics means what it meant in the democratic polis of classical Athens some two thousand years ago: direct democracy, the formulation of policies by directly democratic popular assemblies, and the administration of those policies by mandated coordinators who can easily be recalled if they fail to abide by the decision of the assembly's citizens. (BOOKCHIN, 2006, p.48)

Bookchin also points out the limitations of Athenian democracy, which excluded the participation of slaves, women and strangers from the ongoing discussions on how best to run the society of which they were a part.

The 1789 French Revolution denotes the Birth of Modernity (FEHÉR, 1990), but some earlier moments from history worthy brief consideration. Greek and Roman cultures developed Republics, with elected political representatives governing society, as opposed to being led by someone seen as a descendent of, or a direct link to, the gods, normally a King or Queen, with subsequent rulers being direct descendants of previous rulers by birth right. Voting during Roman times depended

on class, women shared some basic rights with their male counterparts, such as property rights, but were not fully regarded as citizens and therefore not allowed to vote or take part in politics. Slavery was common and formed an important part of the economy, but Rome allowed freed slaves to become citizens with active political freedom including the right to vote for males. Europe during the Middle Ages (5th to 15th century) was a mix of Tribes that swore allegiances to different leaders, forming Kingdoms. Limited democratic parliaments took form in England and Scotland from the early 13th century. The signing of the *Magna Carta* (Great Charter of the Liberties) in 1215, safeguarded individual freedoms against unlawful imprisonment with right to appeal and facilitated parliament be used as a forum to address the general grievances of ordinary people. Regarding cultural diversity in Europe, the 3 main monotheistic religions (Judaism, Christianity, Islam) lived in relative harmony together in what is today's Spain until great changes in the 15th Century saw the development of the inquisition and subsequent expulsion of non-Christians. The discovery of the Americas saw a racist division between Christian Europeans and indigenous peoples with pagan beliefs, who were referred to as savages. The Renaissance (14th–17th centuries) was a rebirth in Europe of new thinking in art, architecture, politics, science and literature, centred primarily in Italy. An influencing factor was the reconnection of the Christian world with ideas from Spain's pre 1492 multicultural world, where Muslim and Jewish ideas on mathematics, science, medicine and astronomy had earlier flourished; the exiled peoples took their ideas with them. In political terms the rise of Italian City State Republics, beginning with Venice, greatly assisted this process, acting as safe havens for the people escaping persecution in mainland Europe after the decline of the Roman Empire, with the multicultural mix, came diverse dialogues and the emergence of new ideas. Naval technological developments opened up new trade routes, led to commerce and banking systems, greater wealth within the city-states and further investment and investigation into ideas from the *Four Corners of the Globe*.

Technological changes can provoke wider societal ruptures. The printing press invented by Gutenberg around 1440, allowed for wider production of books, which allowed for the freer exchange of knowledge. In 1517 Martin Luther posted his *Ninety-five Theses* on the church door at Wittenberg, Germany, which called for a reformation of the Catholic Church, a protest movement: Protestantism. With the arrival of the printing press and Luther's translation of the Bible from Latin into

German, the Reformation was a decisive moment in the spread of literacy, starting in Germany it led to a flourishing of literacy throughout Europe and the wider world. Weber (1905) argues that Britain's advancement as an economic and military power can be traced back to the victory of Protestantism and the changing moral order during the reign of Elizabeth I (1558 – 1603), whose defeat of the Spanish Armada in 1588 altered the power structure of Europe, signifying the end of Spain's dominance. After the Reformation newer attitudes emerged in relation to the generation and use of wealth, principally those of self control, order and self reliance while engaging in trade and the accumulation of wealth for investment. The prevailing economic doctrine in Britain and the Low Countries of the 16th to 18th centuries, mercantilism, is seen by Weber and other scholars as the origin of modern capitalism. The British East India Company, set up in 1600, facilitated Britain's imperialist project in India and later Asia. The sailing of the *Mayflower* in 1620, transporting 100 English Pilgrims to British controlled lands in the Americas saw the advancement of the White Anglo-Saxon Protestant (WASP) elite social class throughout those lands, coupled with the wiping out of huge numbers of indigenous peoples and gradual change of the ecological landscape, as happened to the Southern half of the continent under, mostly, Spanish and Portuguese rule. The slave trade assisted the expansion of European empires around the globe: The mass kidnappings and transportations of entire peoples from African lands under European control to the Americas to increase production of commodity crops to be sold in European markets. Writing about these unjust social impacts of capitalism, Marx commented:

The discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins, signalled the rosy dawn of the era of capitalist production... The different moments of primitive accumulation distribute themselves now, more or less in chronological order, particularly over Spain, Portugal, Holland, France, and England (MARX, 1867, chap 31)

Major technological advancements in Britain from 1760 led to The Industrial Revolution (IR), which signals the start of the process we are attempting to find solutions to today, due to the pumping of CO₂ and other gases into the atmosphere from the chimney smoke of the big textiles factories that started to appear on the British landscape. With the invention of the steam engine, machines replaced human or horsepower. Soon the North European landscape started to be radically altered,

with the creation of canals, railways, street lighting and, most of all, the industrial city with its factory chimneys, coupled with the start of the demographic shift of rural populations moving to the industrial towns to find work and attempt to gain a higher quality of life. Working conditions for people, including children, were severe but with greater densities of people now together in urban clusters, this led to political organisation and the creation of trade unions seeking to improve workers rights.

While moments of protest, or revolt, against wider systems of power and domination have existed throughout history, their success was often short lived. This changed radically at the end of the 18th century. In 1773, due to feelings of lack of representation by American Colonists of the Thirteen Colonies in the distant British Parliament, a rebellion started. Colonists engaged in boycott, direct action, formed their own government and resisted British military might in the first successful colonial war of independence against a European power. The Americans declared independence in 1776 and passed a Constitution through their own courts in 1789, declaring a federal Republic of United States, based on liberty and equality for all. Inspired by events in America and with desires for greater freedom and equality in France, the masses fought the system in Paris, with the poor and women playing major roles. From the creation of a National Assembly that represented people of all classes, to the Storming of the Bastille in Paris, the writing of **The Declaration of the Rights of Man and of the Citizen** and the Women's March on Versailles, the Revolution eventually overthrew the monarchy under Louis XVI and established a peoples Republic. With its Tricolour flag and the 3 core concepts of the revolution; Liberty, Equality, Fraternity, it is seen as one of the most important events in human history and denotes the Birth of Modernity (FEHÉR, 1990). The important symbolism of the revolt was later communicated through Delacroix's iconic 1830 painting: **Liberty leading the People** (IMAGE 5), with the image of *Marianne*, an armed Parisian woman leading the fight for a better, fairer world. It later became the national symbol of the French Republic, a personification of liberty and reason, and a portrayal of the Goddess of Liberty. The Revolution inspired later violent uprisings around Europe and helped spread radical ideas of liberalism, radicalism, nationalism, socialism, secularism and feminism. As to the actual success of the Revolution in France, it is still debated. While unfair privileges of the elites were challenged and beaten and working people won much political gains, it did not lead to a full recognition of women's full sexual rights, as advocated by Gouge and other activists.



IMAGE 5 – LIBERTY LEADING THE PEOPLE
SOURCE: EUGÈNE DELACROIX, 1830

Regarding citizen participation in the Revolution, it was an organic eruption of activity by the citizens of Paris within their urban realm, which successfully transformed the political reality over a series of critical moments in Paris and Versailles, with both sexes from all classes participating. The chaotic violence that forced the political changes was often led by the poorer classes in the front lines, which often included women. It was the starving Paris women in 1789 whose violent actions in Versailles gave belief in the idea that real change was possible, removing forever the aura of invincibility of the monarchy, as Kropotkin stated: “The invasion of the palace by the crowd was one of those defeats of royalty from which it never recovered” (KROPOTKIN, 1909, p. 156). What signalled the outbreak of the French Revolution was the creation of a National Assembly on 9 July 1789, which was a political space of the Third Estate¹³, which represented the common people. Following the storming of the Bastille on 14 July, the Assembly became the effective government of France, soon abolished privileges and feudalism, changed citizenship rights and voting structures and began constructing a new society. The revolutionary

¹³ The First Estate was the clergy, the Second Estate was nobility.

political realm went far beyond the Assembly, it was a wider cultural phenomenon. The quick spreading of news throughout Paris and the country through print groups was an important factor, with women also writing and publishing political journals. This was coupled with the sharing and debating of ideas in political clubs like the *Jacobin* or *Cordeliers*, which prided itself on counting working men and women as members. Members paid a small fee to join and the growing network of clubs facilitated ongoing passionate debate that sometimes led directly to political action or street riots. The Storming of the Bastille happened spontaneously after a debate.

The Revolution led to over half a century of civil insurrection in Europe and around the world culminating in a second great year of revolutions in 1848. All modern moments of political rupture (TABLE 6) are seen as a continuation of 1789.

TABLE 6 – POLITICAL RUPTURES, 1789-1989

YEAR	LOCATION / EVENT	RESULTS & CHARACTERISTICS
1789	French Revolution	Violent Urban Revolt in Paris overthrows Monarchy and gains many civil rights. Women and poor at forefront of new social movements.
1848	European Revolts	Revolts in 50 countries, for liberal values & overthrow of monarchies + old feudal structures, including Latin America. Led to birth of many new European nations.
1871	Paris Commune	Radical government that ran Paris for 2 months. Rebellion against the State. Communards rejected both State and revolutionary dictatorship
1914 - 1918	World War 1	Called "The Great War", or "War to end all Wars". War forged new geopolitical terrain, caused huge devastation and economic problems. Reactions after war created new social movements.
1917	Russian Revolution	Started by women demanding bread, supported by military. Workers took over running of society & expelled monarchy. Huge gains in womens rights. Local Soviets ran society. Overtaken by authoritarian Communist forces
1936	Spanish Revolution	Spanish Republic was attacked by Fascists. Anarchist led revolution lasted 1 year in Catalonia, around Barcelona city. Ended by Authoritarian Communists under orders from Russia. Fascists dictatorship, 1939 -1979
1939-1945	World War 2	Inter war years chaotic & politically polarized. Fascist elements grow & take over states. Leads to War, Genocide and racial crimes against minorities
1960s	Western World	Peaceful cultural Youth revolution with Music, sex & greater freedoms
1968	Global cities	Cultural uprising against Capitalism in Paris sparks unrest in other global cities including Latin America
1989	Berlin	Fall of Berlin wall signified end of Cold War. Signified Capitalism global dominance. Greater economic & democratic freedoms for Eastern Block

SOURCE: ORANIZED BY AUTHOR

This analysis begs the question whether Revolution is something confined to a single country, or must change the entire global order. Understanding the basis on which CP has been built upon, from Athens to Paris to today, we now investigate specific dynamics regarding CP and current projects aiming to change society.

3.2.2 Structures and Dynamics of Citizen Participation

CP is a process that provides citizens, who are private individuals, an opportunity to influence public decisions and has long been a component of the democratic decision-making process. Arnstein's **Ladder of Citizen Participation** (IMAGE 6) from 1969, is one of the most enduring participation frameworks relating between government and citizens, with increasing levels of participation defined in 3 groups: 1) Non-participation: Manipulation, Therapy. 2) Tokenism: Informing, Consultation, Placation. 3) Citizen Power: Partnership, Delegated Power, Citizen Control. Mapuva outlines that at the highest level of the ladder, the most ideal, that of Citizen Control, we find a situation where under Citizen Power, communities are given the opportunity by legislation to contribute or influence decision-making processes.

The bottom-line presented by the Arnstein's Ladder of Participation is that in a democracy, citizen participation is the prime political practice which every democratically elected government should strive to achieve both in principle and in practice. The ladder put citizens at the epi-centre of decision making processes. (MAPUVA 2015. P. 408)

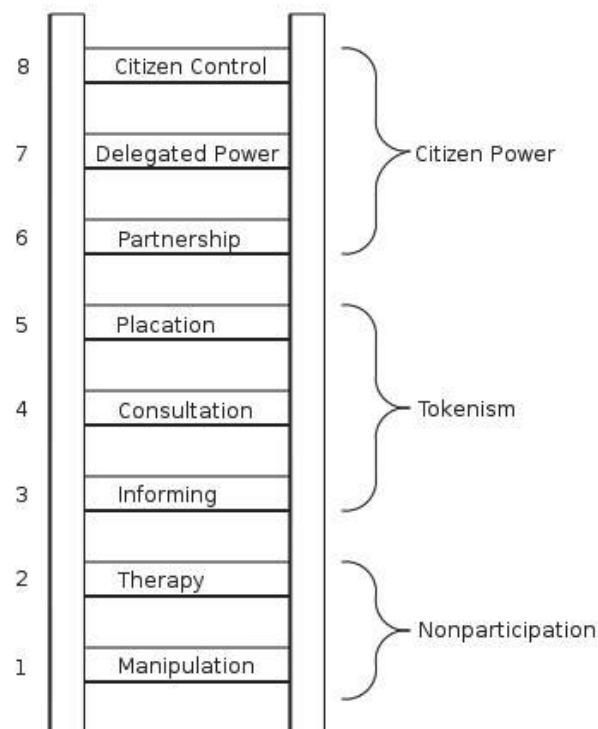


IMAGE 6 – ARNSTEIN'S LADDER OF CITIZEN PARTICIPATION
SOURCE: SHERRY ARNSTEIN, 1969

A variety of techniques exist to facilitate CP. Cogan & Sharpe Identify various levels of public involvement in planning processes (TABLE 7) describing forms that proceed from lower to higher levels, similar to Arnstein's Ladder.

TABLE 7 – TECHNIQUES OF CITIZEN PARTICIPATION

TECHNIQUES	CHARACTERISTICS
Publicity	Designed to persuade and facilitate public support, relating to citizens as passive consumers.
Public Education	Present relatively complete and balanced information so that citizens may draw their own conclusions.
Public Input	Solicit ideas and opinions from citizens. They are most effective when combined with feedback mechanisms which inform participants of the extent to which their input has influenced ultimate decisions.
Public Interaction	Facilitate the exchange of information and ideas among citizens, planners, and decision makers. When these techniques are effectively utilized, each participant has the opportunity to express his or her views, respond to the ideas of others, and work toward consensus.
Public Partnership	Offer citizens a formalized role in shaping the ultimate decisions.

SOURCE: DEVELOPED BY AUTHOR, COGAN & SHARPE (1986 p. 292-294)

Increased Participation of citizens in society means a greater percentage of a community are participating in the process to construct the world around them, which includes the political, social, cultural or economic, as well as the combination between them, such as socio-economic or socio-cultural. A recent report about CP in Latin America from 2005 examines dynamics between 8 countries in Latin America (TABLE 8), based on 3 distinct forms of participation, which we analyse in further depth below: 1) Direct Participation 2) Participation of Opinion 3) Electoral Participation.

TABLE 8 – TYPES OF CITIZEN PARTICIPATION

PARTICIPATION TYPE	CHARACTERISTICS
Direct Participation	Direct protagonism. Participants are protagonists of the destiny of the community or of a collective project. Concepts such as identity, belonging, commitment, militancy, volunteerism, solidarity and social responsibility, are aggregated values of this type of processes. Scope is diverse: political parties, social movements, NGOs, religious organizations, neighbourhood organizations, demonstrations or street mobilizations.
Participation of Opinion	Sharing and helping form public opinion. Sending articles or letters to the media in order to make their views known, to make a complaint or to try to solve a problem.
Electoral Participation	Classical participation in formal electoral processes in democratic countries.

SOURCE: DEVELOPED + TRANSLATED BY AUTHOR, FROM: ÍNDICE DE PARTICIPAÇÃO CIDADÃ NA AMÉRICA LATINA (2005. AUTHORS TRANSLATION, 2017)

3.2.2.1 Structures of Citizen Participation

This dissertation sees CP as the ability of normal citizens to engage in local processes, so as to attempt to affect greater change in the world around them. In recent decades the world has seen many changes that have affected the political landscape, especially since the end of World War 2. Within the Western World and its evolving democracies we can examine 4 specific political areas relating to CP: 1) Civil Society 2) The Third Sector 3) Non-governmental organizations 4) Social movements

1) Civil Society (CS) can be seen as the aggregate of Non Governmental Organizations (NGOs) and institutions that manifest interests and will of citizens or individuals and organizations in a society that are independent of the government. Sometimes the term CS is used in the more general sense, relating to elements such as freedom of speech or independent judiciary, that make up a democratic society.

2) The Third Sector (TS) is so named because it is an area of society that is in contrast to the both the First Sector, that being the Public Sector of the State, and the Second Sector, that being the Private Sector. Potàuček defines it as “the duty of social activity undertaken by organizations that are not-for-profit and non-governmental” (POTÀUČEK, 1999, p.34). A large section of this TS is made up of NGOs. TS has other names including: Voluntary Sector, Community Sector, Non-Profit Sector, "Not-for-Profit" Sector, Social Sector and Civic Sector, the last term emphasizing its relationship to Civil Society.

3) A Non Governmental Organization (NGO) is a not-for-profit organization that is independent from state and international governmental organizations, the term was first coined in 1945, when the United Nations (UN) was created. The first definition of "international NGO" was given in resolution 288 (X) of ECOSOC on February 27, 1950 of "any international organization that is not founded by an international treaty". NGOs are usually funded by donations but some avoid formal funding altogether and are run primarily by volunteers. NGOs are highly diverse groups of organizations engaged in a wide range of activities, and take different forms in different parts of the world. Some may have charitable status, while others may be registered for tax exemption based on recognition of social purposes. Others may be fronts for political, religious, or other interests. UN Secretary General Kofi Annan referred to NGOs as the "conscience of humanity", they are increasingly

active in policy making at the United Nations. NGOs are often seen as the most effective voices for the concerns of ordinary people in the international arena. NGOs include the most outspoken advocates of human rights, the environment, social programs, women's rights and more.

4) Regarding Social Movements (SMs), while there is no fully agreed upon definition of what is a SM, Diani argues that nearly all definitions share three criteria: "a network of informal interactions between a plurality of individuals, groups and/or organizations, engaged in a political or cultural conflict, on the basis of a shared collective identity" (DIANI, 1992). James & Van Seters (2014) stress the concept is based around the idea of 'coming together', around a few minimal conditions:

(1) the formation of some kind of collective identity; (2) the development of a shared normative orientation; (3) the sharing of a concern for change of the status quo and (4) the occurrence of moments of practical action that are at least subjectively connected together across time addressing this concern for change. Thus we define a social movement as a form of political association between persons who have at least a minimal sense of themselves as connected to others in common purpose and who come together across an extended period of time to effect social change in the name of that purpose. (JAMES & VAN SETERS, 2014)

SMs can be seen as a continuation of the dynamics explored in the previous section of this chapter, (2.2.1), such as the various, and sometimes chaotic, groups within the French Revolution of 1789. Castells noted: "Such is the fate of all SMs: they break the old order and inspire a new one that begins to age as soon as it has taken shape. (CASTELLS, 1983)

We will now explore and contrast dynamics, differing views and some tensions between these different groups. While most view NGOs in a positive light, there has been criticism. In offering critical analysis of NGOS and their role in shaping global institutions and domestic political and social change, Baiocchi asks:

Are NGOs the solution to some of the world's most difficult problems, or are they Trojan horses for neoliberal reforms? Do they represent a form of global civil society or simply a circulation of elites? (BAIOCCCHI, 2015)

Fisher also outlines how different interest groups view NGOs in different lights:

The need for unpacking the literature becomes clear when we consider the degree to which the literature on NGOs relies upon several key terms; participation, empowerment, local, and community. Each of which has been

given a variety of meanings and linked in different ways to analysts. Perceptions of the origins, capacities, objectives, and impacts of NGOs. Ironically, with reference to these terms, NGOs have been embraced and promoted in the past decade by international development agencies like the World Bank as well as by radical critics of top-down development. Whether NGOs are seen as a progressive arm of an irresistible march toward liberal democracy that marks the end of history, an extension of the push toward privatization, or a means to resist the imposition of Western values, knowledge, and development regimes depends on the perspective and agenda of the imager. (FISHER, 1997)

SMs have been particularly active in Latin America in past decades, where they have worked for inclusion of a wide range of marginalised groups. Writing in a United Nations Development Programme (UNDP) report, Patrick Heller asks what roles can SMs and civil society play in promoting transformative development in the global South, including the countries of Brazil, India and South Africa:

Inclusive and democratic forms of development depend on a delicate balance between the market, the state and civil society. Globalization has created new opportunities for economic development, but market power has often expanded at the expense of democratic and social accountability. Democratization in the global South and the emergence of new forms of transnational activism offer the hope of re-embedding markets. At both the global and domestic level, prospects for more inclusive development depend largely on the balance between civil society and political society. (HELLER, 2013)

Dynamics between SMs and NGOs working together can be difficult, many call for improved collaboration. The Deputy Advocacy and Campaigns Director of Oxfam, a powerful international NGO founded in England in 1942, outlined the challenge for NGOs to work with SMs on broad coalitions for specific objectives:

We can and must collaborate far more broadly. The environment, development, human rights, migration and many other NGO sectors are deeply intertwined... The Jubilee Debt campaign was another (example) that made a major global impact by bringing together development NGOs, faith groups and many others. First, NGO alliances are difficult to establish, but even more difficult to adapt and sustain with mass public support. Many partners typically means many decision-makers. This is a long-standing dilemma. But it is made far more acute by the rise of new social movements and citizen groups that are far more flexible and give their supporters control over both message and action. (HALE, 2011)

Regarding funding, he states: "The territory traditionally occupied by voluntary sector groups is increasingly being occupied by others. There is a big drive, with money and sophistication behind it, for private sectors to fill spaces of social conscience" (HALE, 2011), which could be viewed with suspicion, given Baiocchi's earlier warnings.

The continued existence of both SMs and NGOs ultimately comes back to the support base they possess, which includes the financial. Many NGOs today are highly organized entities, working in many countries across the planet, with a number of offices with people working full time and getting paid full wages. Other costs include things such as transporting people to events like actions, training workshops, field trips and conferences, printing materials or making t-shirts for campaigns. These big entities need a constant flow of income, which mostly comes from private donations by individuals or Corporate Responsibility (CR) programmes of big national or multinational companies around the world. Similar NGOs working in the same locality often compete for these same resources, which failing to secure enough can mean closure of campaigns or even whole NGOs. Others see the organizational structures of the NGOs being problematic, where people who volunteer their time to help with a cause they identify with, are treated not very well, at the basic level of a very hierarchical structure, never been brought into deeper discussions about campaigns or strategy, merely given a list of tasks to be done. SMs on the other hand can be seen, at times, on the other end of the spectrum. Where groups form, sometimes at a moment of political crisis, in a chaotic fashion, with poor internal communication systems, with little or no resources, but with a burning desire to make a stand, to resist something, or to attempt to bring about a fundamental change in their territory. Of course, these are just generalisations of the negatives at both ends. NGOs and SMs often work together and support each other, be that in sharing resources, working together on a campaign, or building up a culture to bring about fundamental changes. Fisher examines relationships aspects between these 2 groups:

Some of the most important insights about contemporary collective action and NGOs have emerged from the literature on social movements. The best of this work tends to avoid overessentializing NGOs, to attend to the multiple subjectivities of actors, and to take into account the fragmented field within which NGOs operate. Unfortunately, the important and dynamic relationships between NGOs and social movements at the local and national levels have often been overlooked. This oversight occurs in part because analysts of social movements generally stereotype NGOs as primarily social development agencies and contrast the bureaucratization or institutionalization characteristic of some NGOs with the more fluid and fragmented nature of social movements (see, for example, Frank & Fuentes 1990). This view ignores the evidence that NGOs often initiate or sustain social movements (Lehman 1990) or are the institutional vehicles that articulate protest and collective action (Diani 1992). (FISHER, 1997)

3.2.2.2 Dynamics of Citizen Participation

Much of the time when analysing CS groups, the personal is often overlooked, as it is not seen as important as the big battles that NGOs and SMs are engaging in. But increasingly the micro dynamics that individual's experience, both good and bad, can combine to affect the macro. This section looks at aspects from the individual's perspective, why they spend so much time with a project, what makes people participate in the first place. Michael Albert, remarking from 4 decades of leftist activist experience, to this as "making our movement sticky" and talks about the need to understand what makes the glue of human interaction work:

Movement participation should provide people full, diverse lives that real people can take part in, not merely long meetings or obscure lifestyles so divorced from social involvement that they preclude all but a very few people from joining. Yet, over the past few decades, millions of folks have come into proximity of the left, participated in various events and projects, but later opted out. There are many reasons why people often don't stick with political dissent and activism. Not least, a movement that can persevere over the long haul with continuity and commitment needs to uplift rather than harness its membership, to enrich its member's lives' rather than to diminish them, to meet its member's needs rather than to neglect them. (ALBERT, 2002)

He also discussed the financial, how some SMs seem to not place importance on the economic sustainability of projects or movements:

There is a very odd condition in our movements. We know that Money matters in our societies, but we don't seem to realize that Money matters on the left, too. Where does it come from? How is it handled? Is it empowering a few to the detriment of the many? Is there enough of it? (ALBERT, 2002)

Within both NGOs and SMs there are pros and cons for having a tight internal structure, which can be either more hierarchical or horizontal. While more traditional groups tend to have more hierarchical structures, post N30 movements often tend toward more flexible and participative structures. SM structures of the former tended to mirror party political structures, which they were often linked with. The logic here being a new arrival needed to enter at the base and proceed up the ladder. This meant doing the SMs most menial tasks, such as distributing their print media, before proceeding to helping organize a conference. Such groups normally had a small internal or core group who took all the SMs decisions, an individual could finally get to this level after devoting decades of time and loyal service to the SM. In

some cases this system existed out of security concerns. Before the end of the cold war, leftist groups were seen as a threat by security forces of many western countries, and spies were often planted to infiltrate groups. Another reasons for using this structure is for groups using illegal activities, such as direct action, or in extreme cases violence, to achieve their goals. For example, the structure of the now disbanded Irish Republican Army (IRA) terrorist group, had a clandestine Army Council that made decisions then issued orders to its network of small closed cells, each knowing nothing of the activities of other cells. Groups organising in a more horizontal fashion, often use group dynamics and processes that are continuously being refined and improved upon by SMs¹⁴. A critique of pre N30 practice, was that it was normally very male dominated, so newer groups tend to facilitate wider involvement of women and often insist on equal sexual representation in open forum, as well as in formal organisation bodies of SMs. Gender Balance is increasingly becoming mandatory for political parties in many countries. Horizontal groups also engage in direct actions that require internal security, their solution is to create “affinity groups”. These are small cells of friends or trusted comrades who organise and carry out actions together. For example at Climate Camps in the UK, open public daily assemblies would happen where a day of direct action would be coordinated, but sensitive details would be held back from public knowledge. Trust is key in both these structures. Returning to Albert’s *Sticky* concept, a major difference between the 2 structures is that the first often does not allow for much CP, whereas the 2nd does. Post N30 structures tend to offer new comers full access to the open decision making process, which is often made by group consensus or a vote by those present. This means that from the outset they have the option to be involved at most levels and can help create new areas of activity or development of projects. This dynamic, allowing the individual to help shape the wider system, is very healthy for both the SM and the individual themselves. Much of these horizontal processes come from, but are not limited to, libertarian and anarchist theory and practice. Many of these groups were inspired by dynamics from the Zapatista revolt in Chiapas, Mexico, since 1994.

The creation of community and culture is another key dynamic. When groups develop out of the “Activist Ghetto” to create projects that normal citizens are attracted to and start participating in, SMs start to believe real change is happening.

¹⁴ As explored in: Municipalist solutions and Rebel Cities (2.2.5) + The question of Ecocities (2.1.4)

3.2.3 Responses to Today's Global Crises

Different problems exist to which different groups respond. Many SMs and commentators identify today's model of Global Capitalism as the root cause of the current Ecological Crisis. They suggest that any alternative models to today's system need to be based on anti, or post, capitalist ideas or practices that recognize the limits of growth within the finite system of Planet Earth. Klein outlined in her 2014 book, **This Changes Everything: Capitalism vs. the Climate**:

Our economic system and our planetary system are now at war. Or, more accurately, our economy is at war with many forms of life on earth, including human life. What the climate needs to avoid collapse is a contraction in humanity's use of resources; what our economic model demands to avoid collapse is unfettered expansion. Only one of these sets of rules can be changed, and it's not the laws of nature (KLEIN, 2014, p. 27).

From section 2.1 of this dissertation it is clear just how extreme the Climate Crisis is and how failure by society to quickly adapt could signal the destruction of Humanity, as outlined by Capra. While deeply aware of the severity of the threat, Capra also saw the situation as an opportunity for radical change in all of society:

The great challenge of the 21st century will be to change the value system underlying the global economy, so as to make it compatible with the demands, of human dignity and ecological sustainability. As the new century unfolds, there are two developments that will have major impacts on the well being and ways of life on humanity. Both have to do with network, and both involve radically new technologies. One is the rise of global capitalism: the other is the creation of sustainable communities based on ecological literacy and the practice of eco design. (CAPRA, 2002, p. 229)

Planet Earth is a system of limited resources. Capitalism's early development grew when factories in the North of England started uncontrolled pumping out of higher quantities of CO₂ into the atmosphere. The system has now hit its limits and something has to change, as Boulding declared: "Anyone who believes in indefinite growth in anything physical, on a physically finite planet, is either mad or an economist" (BOULDING, 1966). Part of today's problem is that, due to the complex language used, few people fully understand what Economy actually means. Many equate "the economy" simply with business, profit generation and the markets. Kumar, being literary radical, helps us here by returning to the roots of the word Economy, while outlining its deep relationship to the equally important word Ecology:

Ecology and Economy are derived from three Greek words: oikos, logos, nomos. 'Oikos' means home: a place of relationships between all forms of life, sharing and participating in the evolution of the Earth community. 'Logos' means the knowledge of our planet home, and 'nomos' means management of that home. (KUMAR, 2009)

Kumar from India, was inspired by Schumacher's Buddhist economics (1973) and moved to England. In 1990 Kumar set up the Schumacher College in Totnes. TT began here in 2006, which supports PC inspired Creative Descent strategies (IMAGE 7) with local communities all around the planet, to reduce energy and resource dependence, pollution and environmental degradation, while heightening community resilience through CP. TT is one of the many Post Carbon initiatives currently active globally. Similar SMs include Degrowth and Agroecology, which is active in Brazil and Curitiba projects explored later. Other PC inspired groups include GEN and GAIA Education. Regarding Post Carbon initiatives, TT founder Hopkins outlines:

The end of what we might call The Age of Cheap Oil (which lasted from 1859 until the present) is near at hand, and that for a society utterly dependent on it, this means enormous change: but that the future with less oil could be preferable to the present, if we plan sufficiently in advance with imagination and creativity (HOPKINS, 2008)

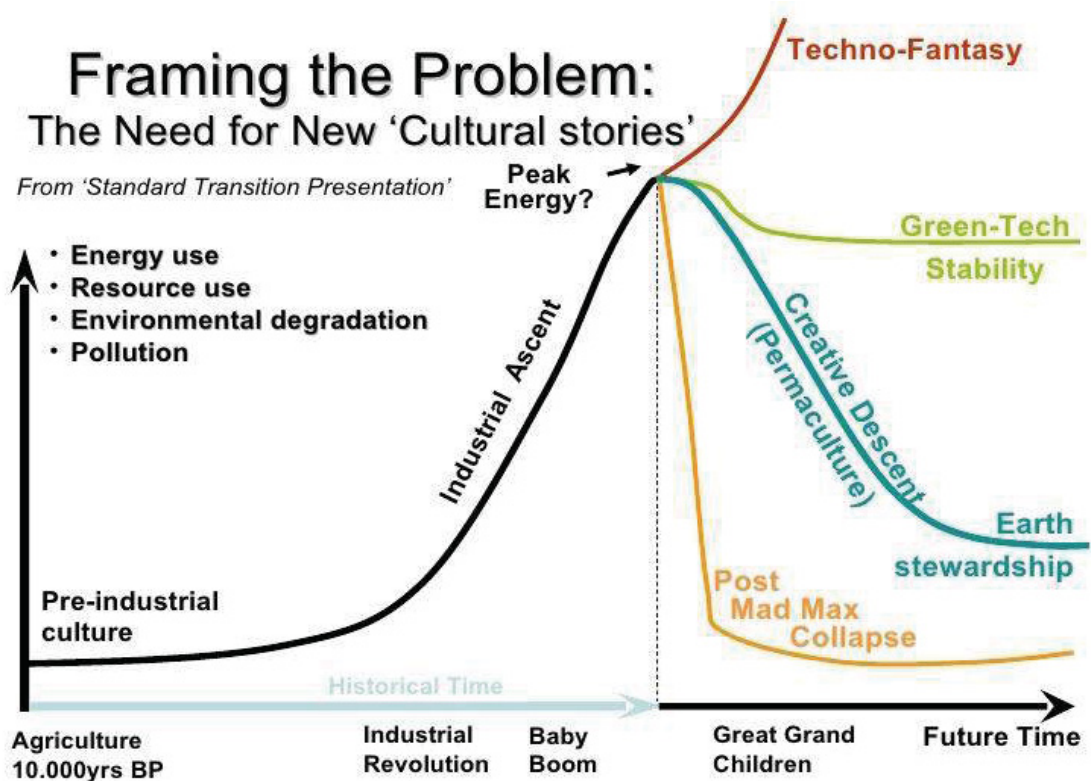


IMAGE 7 – PERMACULTURE INSPIRED CREATIVE DESCENT
SOURCE: ALEXIA COKE, (2010)

Being one of the earliest to identify humanities ecological crisis (1962), Bookchin advocated the philosophical solution he called Social Ecology, an appeal for social reconstruction along ecological lines to create a truly ecological society. For him, present ecological problems originate in deep-seated social problems, due to an aggressive hierarchical and exploitative class society that exploits for power and profit through economic growth, gender oppressions, ethnic domination and corporate, state, and bureaucratic incursions. His solution is to confront these forms of domination “by collective action and by major social movements that challenge the social sources of the ecological crisis, not simply by personalistic forms of consumption and investment that often go under the oxymoronic rubric of “green capitalism.” (BOOKCHIN, 2007, p.22). Politically, Bookchin advocated anarchism until he broke with it in 1999; but all his solutions are based around Active Citizenry:

But no ethics or vision of an ecological society, however inspired, can be meaningful unless it is embodied in a living politics. By *politics*, I do not mean the statecraft practiced by what we call politicians – namely, representatives elected or selected to manage public affairs and formulate policies as guidelines for social life. To social ecology, politics means what it meant in the democratic *polis* of classical Athens some two thousand years ago: direct democracy, the formulation of policies by directly democratic popular assemblies, and the administration of those policies by mandated coordinators who can easily be recalled if they fail to abide by the decision of the assembly's citizens. (BOOKCHIN, 2007, p.48).

This *living politics*, goes by different names in different locations in today's world. It can be seen as a grassroots democracy at a global scale, as Finley notes:

A growing number of people in the world are proposing “communalism”: the usurpation of capitalism, the state, and social hierarchy by the way of town, village, and neighborhood assemblies and federations. Communalism is often used interchangeably with “municipalism”, “libertarian municipalism” (a term also developed by Bookchin) and “democratic confederalism” (coined more recently by Abdullah Öcalan). (FINLEY, 2017)

Social Ecology took a surprising turn in the last decade, due to Bookchin's writings on Communalism being read by the imprisoned Kurdish leader Abdullah Öcalan in prison in Turkey. This led the Kurdish independence movement, the PKK, to move away from their Marxist-Leninist ideas of national liberation to Democratic Confederalism. Due to the political instability in Syria, including the war against ISIS, a giant experiment is underway in the mostly Kurdish Northern Syrian region, Rojava. A Feminist and anti-capitalist society has been created, based around networks of

grassroots people's assemblies and co-operatives, or communes, who have declared their autonomy from the state, instead building what they refer to as a real democracy. Society is structured in fractal like fashion: The communes form confederations with each other across regions. Local assemblies elect representatives at the village or street level and these representatives represent their assembly at the level of the city or region. The city or region elects representatives to represent them at higher levels. This is all happening within a vicious multi sided war in Syria, where women's anti-fascist militias fight ISIS alongside male comrades. In recent years, international volunteers travelled to support and fight in the revolution. Turkey launched a military strike against the region in 2018, the future is unclear.

Confederalism offers a structure for possible future Ecocities (p.46), but more investigation is needed into network structures and flows, as touched upon by these Network Diagrams (IMAGE 8): A) Baran (1964): Centralized, Decentralized, Distributed B) Halpin & Summers Scale Free network of different Hubs C) Serotonin receptor diagram D) The Internet 2005 E) Twitter interactions graphic, Barcelona.

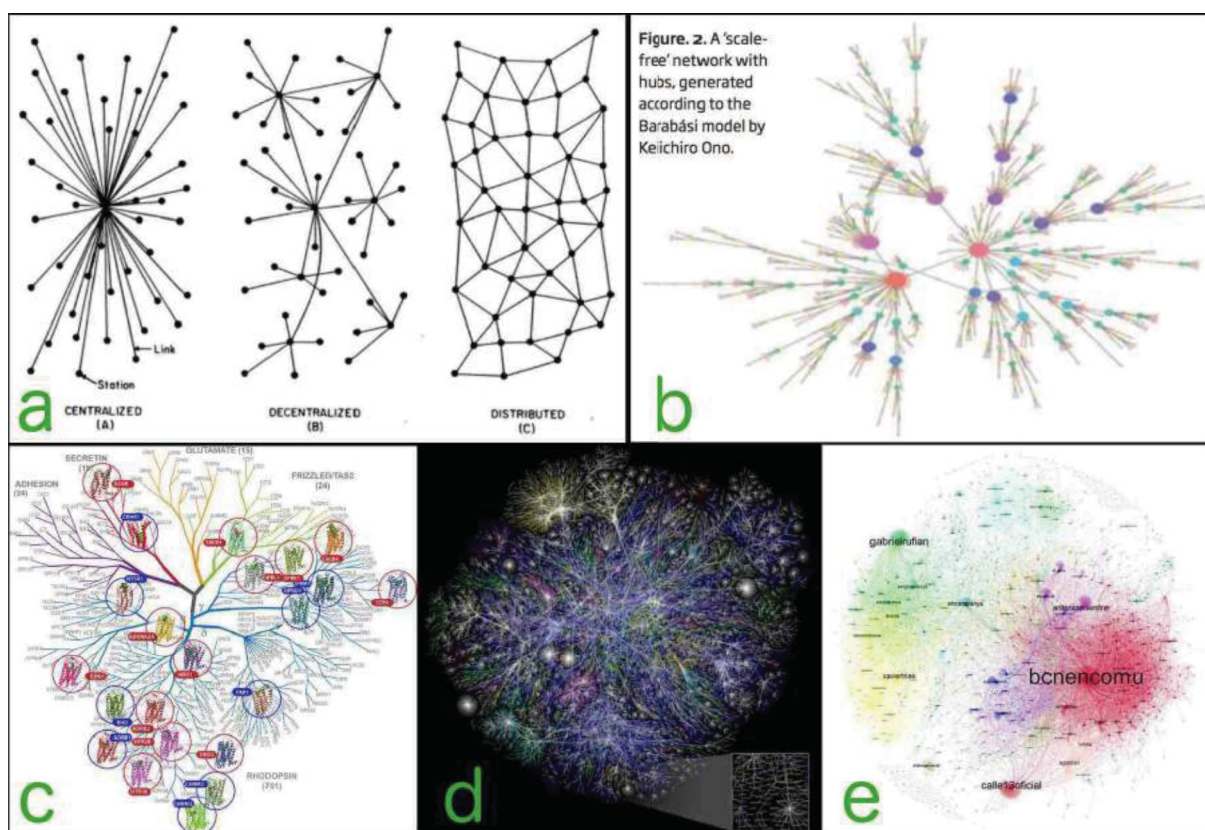


IMAGE 8 – NETWORK STRUCTURES

SOURCE: A: BARAN (1964) B: KEIICHIRO ONO, IN HALPIN & SUMMER (2008) C: CHEREZOV ET AL. (2013) D: WIKIPEDIA (2005) E: OCCUPY DESIGN (2015)

3.2.3.1 The Right to the City and Urban Revolts in the Network Age

Examining the City as a political theatre, 50 years after the publication of Henri Lefebvre's work on **The Right to the City** (R2C) (1968) we remember the ongoing global population shift and the increased political role that the city offers (Global urban population; 1800 = 3%, 1900 = 10%, 2000 = 50%, 2050 = 75%) (UN, 2014). With the arrival of new actors, the R2C hope is that the city can become the physical space for the construction of improved forms of democracy, allowing for the inputs of all citizens, to improve living standards and create sustainable communities and cities, because "The freedom to make and remake our cities and ourselves is one of the most precious yet most neglected of our human rights" (HARVEY, 2012).

Murray Bookchin's **Our Synthetic Environment** (1962) noted the city man had "reached a degree of anonymity, social atomization, and spiritual isolation that is virtually unprecedented in human history" and added 2 years later in **Ecology and Revolutionary Thought**, "it is impossible to achieve a harmonization of man and nature without creating a human community that lives in a lasting balance with its natural environment" (BOOKCHIN, 1964). Sadly attempts to follow his advice have been slow. Some months after the publication of Lefebvre's R2C in Paris, unrest sparked there, as well as in Mexico, the US and other world cities, leading to the development of urban SMs who questioned the role of the State, capitalism, war, inequality and other ills. Important advances happened in the following 3 decades, but November 30th 1999 (N30) was the day that "Permanently changed the political landscape of globalization" (CAPRA, 2002). A turning point for political activity, the day a new form of activism emerged on the streets of Seattle which targeted and successfully shut down the World Trade Organization (WTO) meeting by peaceful street protest. The arrival of new strategies of resistance against the corporate globalisation system. The photograph of a banner drop from a crane (IMAGE 9) represents this movement today, just as much as Delacroix's *Marianne* (IMAGE 5) represented Paris after 1789. The key to the success of N30 was a globally networked horizontally organized diverse coalition uniting physically in the public realm. This diverse mix, not seen before, included a block of communication activists that created the first open source volunteer run media network *indymedia*, as part of their strategy of resistance and fight. Castells correctly imagined such a scenario in his **Network Society** (CASTELLS, 1997). For him, networks are "the most adaptable

and flexible organizational forms, so following very efficiently the evolutionary path of human social arrangements” (CASTELLS, 2005. p.4). They also have to be global:

Furthermore, because the network society is based on networks, and communication networks transcend boundaries, the network society is global, it is based on global networks. So, it is pervasive throughout the planet, its logic transforms extends to every country in the planet. (CASTELLS, 2005. p.4)



IMAGE 9 – ANTI WTO BANNER DROP, SEATTLE
SOURCE: CITIZENSTRADE.ORG, (1999).

Reflecting 3 years after N30, Capra identified the 2 key areas that emerged which humanity is still attempting to respond fully to: The rise of global capitalism and the creation of sustainable communities (CAPRA, 2002, p.229. Full quote: p. 61). Technology has developed incredibly since N30, especially with the emergence of social media, allowing greater participation by the public in sharing of personal

opinions and news in online public realms, which echoes Indymedia's earlier slogan "Don't hate the media, Be the media". Twitter, Facebook and Youtube were sighted as prime tools of battle in the Arab Spring, which inspired the 2011 urban revolts in Spain and subsequently led to Occupy in the US, which continue to be built upon. CP in all these instances was key, allowing far greater means for all citizens to become actors in the shaping of their community, their city, their world. This is why R2C now seems to be so possible, as Harvey outlined, expanding on Lefebvre's revolutionary concept of heterotopia, which does not wait for the grand revolution to come along, but instead seeks to create change when "something different" comes along:

The spontaneous coming together in a moment of "irruption", when disparate heterotopic groups suddenly see, if only for a fleeting moment, the possibilities of collective action to create something radically different. (HARVEY, 2012, p. preface xvii)

Castells highlighted what these urban revolts had in common: all were interwoven inextricably with the creation of autonomous communication networks supported by the Internet and wireless communication (CASTELLS, 2012). In his aptly titled book **Why It's Kicking Off Everywhere: The New Global Revolutions** (MASON, 2012), Paul Mason reported directly from groups on the ground in cities around the Mediterranean, from Athens to Cairo to Barcelona. He argues that the economic collapse of 2008 was a major catalyst and that the events reflect the expanding power of the individual who calls for new political alternatives to elite rule and global poverty. Echoing Capra's earlier point about power of the network and radically new technologies, Mason identifies the Internet, social media, mobile telephone communications as having created networked individuals, facilitated the power of collaboration and the challenge horizontal social networks pose to repressive states, corporations and traditional closed ideologies.

Mason's book is an expansion of a blog post he wrote in February 2011 called "Twenty reasons why it's kicking off everywhere", which went viral and has been retweeted hundreds of thousands of times, studied and critiqued by protesters all over the world. Below is a shortened version of those 20 points (TABLE 9). Mason argues (2015) that what is emerging, from necessity, are networked global urban individuals who are part of a growing global movement that rejects capitalism and is replacing it with Post-Capitalism values and new forms of work and living.

TABLE 9 – WHY ITS KICKING OFF EVERYWHERE, MASONS 20 POINTS

#	POINT
1	At the heart if it all is a new sociological type: the graduate with no future
2	with access to social media, such as Facebook, Twitter and eg Yfrog so they can express themselves in a variety of situations ranging from parliamentary democracy to tyranny.
3	Therefore truth moves faster than lies, and propaganda becomes flammable.
4	They are not prone to traditional and endemic ideologies: Labourism, Islamism, Fianna Fail Catholicism etc... in fact hermetic ideologies of all forms are rejected.
5	Women very numerous as the backbone of movements...the "archetypal" protest leader, organizer, facilitator, spokesperson now is an educated young woman.
6	Horizontalism has become endemic because technology makes it easy: it kills vertical hierarchies spontaneously
7	Memes: ideas arise, are very quickly "market tested" and either take off, bubble under, insinuate themselves or if they are deemed no good they disappear. Ideas self-replicate like genes.
8	They all seem to know each other: not only is the network more powerful than the hierarchy - but the ad-hoc network has become easier to form. (Online and Real World networks combining)
9	The specifics of economic failure: the rise of mass access to university-level education is a given. Maybe soon even 50% in higher education will be not enough.
10	This evaporation of a promise is compounded in the more repressive societies and emerging markets because - despite rapid economic growth - it cannot absorb the demographic bulge of young people fast enough to deliver rising living standards for enough of them.
11	To amplify: I can't find the quote but one of the historians of the French Revolution of 1789 wrote that it was not the product of poor people but of poor lawyers. You can have political/economic setups that disappoint the poor for generations - but if lawyers, teachers and doctors are sitting in their garrets freezing and starving you get revolution. Now, in their garrets, they have a laptop and broadband connection.
12	The weakness of organised labour means there's a changed relationship between the radicalized middle class, the poor and the organised workforce. The world looks more like 19th century Paris - heavy predomination of the "progressive" intelligentsia, intermixing with the slum-dwellers at numerous social interfaces (cabarets in the 19C, raves now);
13	This leads to a loss of fear among the young radicals of any movement: they can pick and choose; there is no confrontation they can't retreat from. They can "have a day off" from protesting, occupying..
14	In addition to a day off, you can "mix and match": I have met people who do community organizing one day, and the next are on a flotilla to Gaza; then they pop up working for a think tank on sustainable energy; then they're writing a book.
15	People just know more than they used to. Dictatorships rely not just on the suppression of news but on the suppression of narratives and truth. More or less everything you need to know to make sense of the world is available as freely downloadable content on the internet..
16	There is no Cold War, and the War on Terror is not as effective as the Cold War was in solidifying elites against change. Egypt is proving to be a worked example of this: though it is highly likely things will spiral out of control, post Mubarak..
17	It is - with international pressure and some powerful NGOs - possible to bring down a repressive government without having to spend years in the jungle as a guerilla, or years in the urban underground..
18	People have a better understanding of power. The activists have read their Chomsky and their Hardt-Negri, but the ideas therein have become mimetic: young people believe the issues are no longer class and economics but simply power..
19	As the algebraic sum of all these factors it feels like the protest "meme" that is sweeping the world - if that premise is indeed true - is profoundly less radical on economics than the one that swept the world in the 1910s and 1920s..
20	Technology has - in many ways, from the contraceptive pill to the iPod, the blog and the CCTV camera - expanded the space and power of the individual.

SOURCE: MASON, (2011) ORANIZED BY AUTHOR

We will now explore what happens when these networks start to actually win.

3.2.4 Municipalist Solutions and Rebel Cities

This section examines a recent 2-part process in CP, which is still ongoing, experimental, and inspirational. It demonstrates lived examples of some of the theory that this dissertation explored already. It explores events in Spain after the economic crisis of 2008, examining first the dynamics of the massive street occupations of the *indignados* (indignant ones) in 2011, focusing specifically on the city of Barcelona, followed by the municipal elections in 2015 which saw the victories of social movements in 8 Spanish cities, ushering in what was later labelled the “Rebel Cities” of Spain. These Municipalist movements offer a glimpse of what a future ecocity network might look. Similar open movements are starting to emerge in Curitiba.

3.2.4.1 The Spanish Revolution, Street Occupations, Indignados (2011)

The 2008 economic crisis in Spain led to massive austerity cuts, bank repossessions of housing, rise in suicides and a spike in unemployment with youth unemployment rising as high as 56% (BURGEN, 2013). Out of this misery and anger a coordinated day of direct action happened in a network of cities throughout Spain on the 15th of May 2011, with Spanish public squares being occupied by the *Indignados* movement (15M), named after the former French resistance fighter Stéphane Hessel’s pamphlet **Indignation** (2010). They demanded a complete reboot of how politics was done in Spain, calling for Real Democracy (CASTELLS, 2012; MASON, 2012). The occupations lasted for 2 months, with the hashtags #SpanishRevolution and #15M used by activists on social media also becoming names for the movement. From the start, there was a continuous occupation of squares all over Spain by the public, to start an open dialogue about how to get out of the economic crisis. 1000’s arrived in the squares, formed assemblies, made decisions collectively and slept in the squares. In Barcelona’s *Plaça de Catalunya* (Catalonia Square), activists set up infrastructure, tents, a kitchen, information points, had workshops and meetings, and held an open public general assembly every evening. From the start there was a light police presence, which watched but did not interfere, but on May 27th, orders were given to displace the square in the early morning. After 6 hours of police violence, 147 people were injured, many seriously.

Shocking pictures flooded firstly social media, then the mainstream: This resulted in 20,000 people expressing solidarity by retaking the square that day (IMAGE 10).

While initially created by established activist groups and SMS, quickly numbers grew at the evening assemblies. People sat around in a circle that could easily expand outward and also allowed for the general public to walk around and listen in. People took turns to come to the speaking area to make points, suggestions, share views, tell personal stories, at the start with a simple loudhailer (IMAGE 11), soon replaced by a sound system. It was something special to witness, to see how quickly members of the public turned from spectators at the edge to participants, it was people from all walks of life, young, old, working, unemployed, man, woman, student, granny, the discussions reflected the diverse, passionate and intense desires for improving things. Online toolkits helped facilitate the process; at the meetings, 1 person spoke at a time, people listened, there were a series of hand signals to assist, rolling of index fingers or hands if the speaker was rambling, crossed forearms to indicate blocking a proposal and the waving of open hands to show agreement (IMAGE 13) with a proposal or a quite way to clap. People spoke to the crowd, proposals were made, agreements were taken by those in the square and things developed in this way for 2 months. Although not without disagreements and problems, it was a stunning example of direct democracy in action.

In terms of infrastructure there were a series of 14 commissions, which anybody could participate in, many of which had sub commissions, to facilitate the quick expansion of the urban phenomenon (IMAGE 12, translated TABLE 10). Everybody had a role, if they wanted; kitchens were set up, living quarters developed, In a very short period, a self-organized open system transformed the national discussion through a network of citizen led direct actions in the public realm. Castells (2012) referred to this form of urban action in his native Spain as “A Rhizomatic Revolution”¹⁵, noting how after the initial actions of 15M, the structure multiplied rapidly “Over 100 Spanish cities following suit, triggering a massive occupy movement that spread in a few days to almost 800 cities around the world” (CASTELLS, 2012, p.114). Quickly communicating this reality reinforced the network,

¹⁵ Deleuze & Guattari philosophical Rhizome concept in their **Capitalism and Schizophrenia** (1972–1980) project is based on the botanical structure of the creeping rootstalks Rhizomes, which grow perpendicular to the force of gravity and have the ability to allow new shoots to grow upwards from new nodal points.



IMAGE 10 – 15 M INDIGNADOS OCCUPY PLACA CATALUNYA, SPAIN
SOURCE: EDU BAYER, ELDIARIO.ES, (2011).



IMAGE 11 – DEMOCRACY IN ACTION, PLACA CATALUNYA:
SOURCE: ACAMPADABCN (2011)

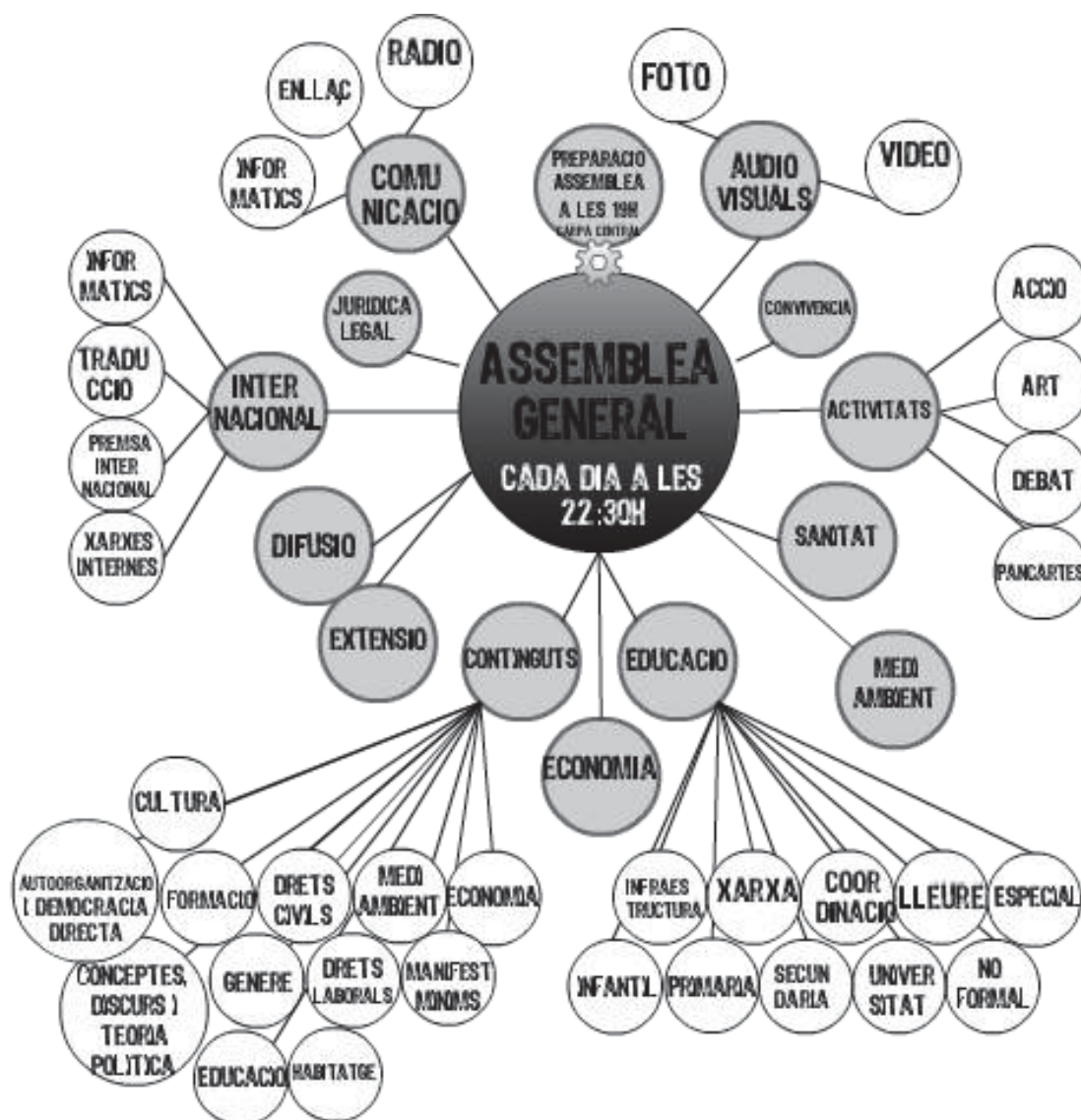


IMAGE 12 – PLACA CATALUNYA ASSEMBLY ORGANIZATION STRUCTURE
SOURCE: APUNTS SOBRE L'ABISME – TAKE THE SQUARE (2011)



IMAGE 13 – HANDS SHAKING IN AGREEMENT AT ASSEMBLY PROCESS
SOURCE: LA VANGUARDIA (2016)

TABLE 10 – ORGANIZATION STRUCTURE OF PLACA CATALUNYA ASSEMBLY COMMISSIONS

GENERAL ASSEMBLY – EVERY DAY AT 22.30H			
# - COMMISSION	SUBCOMMISSIONS	# - COMMISSION	SUBCOMMISSIONS
1 - Audiovisual	Photo Video	8 - Content	Culture Training Civil Rights Environment Economy Manifest XXX (Cant read) Labour Rights Gender Self Organization & Direct Democracy Concepts, Discussion & Political Theory Education Housing
2 - interaction		9 - Extension	
3 - Activiities	Action Art Debates Banners	10 - Diffusion	
4 - Health		11 - International	Computer Systems Translation International Media Internal Networks
5 - Environment		12 – Legal Issues	
6 - Education	Infrastructure Network Coordination Freedom Special Children Primary Secondary University Non Formal	13 - Communication	Radio Online Linking International Media Computer Systems
7 - Economy		14 – Assembly Preparation – At 19h Central Area	

SOURCE: DEVELOPED BY THE AUTHOR (2017) - APUNTS SOBRE L'ABISME – TAKE THE SQUARE (2011)

which happened in both the digital and physical (IMAGE 14) worlds simultaneously, with pins added on a world map in the info point in *Plaça de Catalunya* acting as a form of rapid constant feedback loop. Castells noted “The emergence of mass self-communication offers an extraordinary medium for social movements and rebellious individuals to build their autonomy and confront the institutions of society in their own terms and around their own projects” (CASTELLS, 2007, p.249) and examples of the mutually global and local aspects of these networks were perhaps best expressed between Barcelona and Athens; the 2010 “Peoples of Europe Rise Up” banner

unfurled at the ancient Acropolis appeared in 2011 as a handmade placard on Barcelona's streets (IMAGE 15). Lastly was the beautiful moment of shared real time communication between the 2 cities united in the same struggle; a live video transmission between Barcelona's square and Syntagma square in Athens (IMAGE 16), taking the Peer to Peer (P2P) concept to Square to Square (S2S), through global solidarity and direct action. Soon after, the Occupy movement erupted in US cities and in 2013 similar citizen mobilizations erupted in many Brazil cities.



IMAGE 14 – NETWORK ENCAMPMENTS MAP, BARCELONA
SOURCE: AUTHOR (2011)



IMAGE 15 – PEOPLE OF EUROPE RISE UP: ATHENS & BARCELONA
SOURCE: (L) LOUISA GOULIAMAKI/AFP/GETTY (R) LLUIS GENE/AFP/GETTY (2010, 2011)



IMAGE 16 – SQUARE TO SQUARE (S2S): BARCELONA & ATHENS
SOURCE: CRIMETHINC. (2011)

Nobody fully expected the 2011 Spanish Revolution to make the impact it did. It was perhaps a very rich example of Lefebvre's revolutionary concept of heterotopia, those few weeks being but a fleeting moment when some groups saw that something radically different was not only possible, but had actually sparked into existence. Although facilitated extremely well by experienced activists from SMs long used to diverse group dynamics, it was the rapid opening up of the common space which truly made it a profoundly successful urban rupture, as more citizens took a stand, made a point or started to actively participate for the first time, in both the real and digital realms together: reading and commenting on new reports, retweeting links to short quickly edited videos, sending messages from the plaza to friends on whatsapp lists, waving hands or making a statement at the nightly assembly... together in this joined space, or idea, that forms the core of living and acting in the network age, Spain took bold steps into the unknown. Speaking about the *acampada* (encampment) after the first week, Barcelona activist Esther Vivas predicted:

We are witnessing the birth of a movement whose energy, enthusiasm, and collective strength has not been seen since then (2001). It will not, therefore, be a nostalgic tenth anniversary (of the Anti-Globalization, World Bank summit in Barcelona of 2001). Quite the contrary. We are going to celebrate it with the birth of a new movement. (VIVAS, 2011)

Although it was a slow process and took some time, she was correct: 4 years later her city, Barcelona, went through even more profound change, opening up the Common Space even further. While built upon those same forces that gave rise to and grew quickly in 2011, this part of the story has taken things to a completely new level. We turn our focus now to 2015.

3.2.4.2 A Feminist Democratic Revolution in Spain's Rebel Cities (2015)

Spain's 2015 municipal elections results on 24 May 2015 saw 8 cities seeing wins by citizen platforms, outside the traditional political party system, who took decisions collectively through local assemblies. This phenomenon has subsequently been named Spain's *Rebel Cities*. The city of Barcelona saw the election of a woman as mayor for the first time in over 2,000 years; she is the first member of Spain's *indignados* protest movement to win public office. Ada Colau was the leader of the anti eviction group *Plataforma de Afectados por la Hipoteca (PAH)* (Platform for People Affected by Mortgages) whose direct actions of diverse groups wearing green tee-shirts included blocking evictions and occupations of banks, for which Colau was removed and arrested by riot squad in 2013 (IMAGE 18), 2 years later she became their boss. The political organization she is part of, *Barcelona en Comú* (Barcelona together - BEC), work on a Municipalist only platform, seeking power only at the city level, based on a set of related characteristics (SHEA BAIRD, 2017): 1) Distinctive political organization reflects diversity of local political landscape 2) Open and participatory decision-making processes 3) Organizational structure is relatively horizontal (for example, based on neighbourhood assemblies) and guides elected representatives 4) Capacity for institutional action depends on strong, organized movements in the streets that push elected leaders. Their structure and work method is very much a continuation of the earlier groups, SMs and processes they have grown from (IMAGE 17), BEC claim a feminist democratic revolution is underway, to further open up the Common Space in Barcelona based on deep communication processes that allows for a city that listens. They have occupied the institutions of the mayor's office, dispersing power by opening them up to the various assemblies in the city neighbourhoods, where the members of the mayors team and residents discuss plans and projects that affect them (IMAGE 19), thereby residents are co-creating their neighbourhoods of the future, based on an open participative planning process.

WHAT'S THE RECIPE FOR A MUNICIPAL MOVEMENT?



IMAGE 17 – MUNICIPAL MOVEMENT RECIPE
SOURCE: ZEMOS98, BARCELONA EN COMU, (2016).



IMAGE 18 – ADA COLAU ARRESTED BY RIOT POLICE
SOURCE: AP PHOTO/PACO SERINELLI, (2013)



IMAGE 19 – FEMINIST ASSEMBLY IN GRÀCIA NEIGHBOURHOOD
SOURCE: IKIMILIKILIKLIK (2017).

Having been an activist with various SMs over many years, Colau has slowly built things up to where she is now, along with her comrades. As an *indignado*, and later with PAH, came the anger with the existing order, but also the conviction that necessary change was coming. Writing a half-year before her election win, in a local paper while acting president of PAH, she predicted:

We live in turbulent times. Every day we wake up to a new story of corruption in the newspapers. Of course we're angry. But this indignation is useless if there is no alternative... citizens have finally had enough and are getting down to work. A democratic revolution is sweeping the country which aims, not only to kick the mafia out of our institutions, but also to change the rules of the game so that this can never happen again. (COLAU, 2014)

While Colau's win was celebrated widely around the world, with many articles asking things like "Is this the world's most radical mayor?" (HANCOX, 2016), it is essential to outline that she is part of and deeply committed to the wider BEC collective that has constructed a different way of doing politics. A week after the victory, Colau clearly outlined her views about this Democratic Revolution:

What is happening in Spain and in Barcelona is not an isolated event; rather, there is a crisis in the way we do politics. There is a political elite which has become corrupt and has ended up as accomplices of a financial power which only thinks to speculate and to make money even at the expense of rising inequality and the impoverishment of the majority of the people. Fortunately, there has been a popular reaction, here and in other parts of the Mediterranean—for example, in Greece—to confront the neoliberal economic policies, which are not only a problem in Spain but in Europe and around the world. We see very clearly that the city councils are key to confronting this way of making policy, meaning that is where the everyday policies are made and where we can prove there is another way to govern, more inclusive, working together with the people, more than just asking them to vote every four years, and that you can fight against corruption, and you can have transparent institutions. So we think the city governments are key for democratic revolution, to begin governing, with the people, in a new way. But on the other hand, we're very aware that the real change must be global, that one city alone cannot solve all the problems we're facing, many of which are global because today the economy does not have borders. The big capital and the markets move freely around the world, unlike people. (COLAU, 2015)

The BEC website states (Jan 2018) "Democracy is much more than voting every 4 years. A new regime of Citizen Participation is in Barcelona. You propose, you decide!" and having begun their ambitious project in Barcelona, they were keen to build on the network with their fellow Spanish 7 Rebel Cities, but also help develop solidarity, support and united struggle with similar Municipalist movements around Europe and throughout the world. In 2016 there were similar Municipalist victories in the Italian cities of Naples, Rome, Venice, and Messina, now more European cities are developing similar approaches. They have a dedicated technical team to clearly communicate news, decisions and the rest on social media, with dedicated whatsapp and telegram channels for news updates, active Facebook, twitter and Youtube channels which live stream and archive important conferences, thereby attempting to make all content as accessible as possible, again, attempting to widen the Common Space, in both the real and virtual senses. BEC also clearly see themselves as part of the global R2C movement, Colau as mayor was vocal in pushing for inclusion of R2C in the UN's New Urban Agenda (NUA) document, which was ratified at Habitat III in Quito in October 2016, about which she stated:

I believe you can't talk about a just, sustainable, equitable or inclusive city if you don't speak about the right to the city. The reference to it in the UN's NUA could be more ambitious, in my opinion. But we should also recognise the problems we have overcome just to get this far. Global powers such as the United States and China resisted it completely; they didn't want the right to the city in the declaration at all. But thanks to popular mobilisation in Latin America and in some European countries, this political movement has won its place on the agenda – and it is a significant achievement. The resisting member states were forced to put it in; they had to recognise that the vast majority of the population is located in cities – and it's only going to increase. But for the right to the city to become real, we have to fight, starting tomorrow, for it to be transformed into concrete policies and regulations. (COLAU, 2016, Guardian)

To mark their first year in office, BEC published a 12 page PDF “**How to win back the city en comú**” to explain the origins, philosophy, and strategies of the new Municipalist movement in the Spanish state to activists in cities around the world, forming part of BECs mission to support the construction of a network of ‘rebel cities’ to transform Europe from below, stating: “We know that there are many similar initiatives to our own in other cities that aim to break apart the current political and economic regime from below. Each city will have to find its own way, whether it takes the electoral route or not” (BARCELONA EN COMÚ, 2016). They followed this up the following year by organizing an international Municipalist summit, called **Fearless Cities**: “In a world in which fear and insecurity are being twisted into hate, and inequalities, xenophobia and authoritarianism are on the rise, towns and cities are standing up to defend human rights, democracy and the common good” (BARCELONA EN COMÚ, 2017). Representatives came from all over the world (IMAGE 20), including 7 cities in Brazil (Belem, Fortaleza, Brasilia, Rio de Janeiro, São Paulo, Ilhabela & Belo Horizonte) and councillor Áurea Carolina de Freitas¹⁶ from *Cidade que Queremos* (City that we want) movement in Belo Horizonte was 1 of the guest speakers. The 3 day conference was divided along 3 lines: 1) Work as a global Municipalist network: Share tools, knowledge and experiences with Municipalist movements from around the world. 2) Feminize politics: Develop new ways of organizing based on horizontal collaboration, collective intelligence and the politics of everyday life. 3) Stop the far right: Combat the politics of hate and fear with local policies to reduce inequality and promote the common good. The event slogan became the resilient rallying cry of defiance, after Barcelona suffered a terrorist attack 2 months later: *Ciutat sense Por* in Catalan (*Ciudad sin Miedo* in Spanish).

¹⁶ Video: <http://fearlesscities.com/interviews/councilor-belo-horizonte-brasil-aurea-carolina-de-freitas/>



IMAGE 20 – FEARLESS CITIES GLOBAL NETWORK
SOURCE: BARCELONA FEARLESS CITIES CONFERENCE 2017

While not without criticisms from all sides of the political spectrum, Colau has received overall positive support as Mayor. 2019 will be the next municipal elections in Barcelona, it will be interesting to see if she runs again and whether BEC are elected for a second term in office. There are currently many campaigns and projects they are working on, most notably, cracking down on illegal Airbnb rentals, going open source by Spring 2019 (The City has plans for 70% of its software budget to be invested in open source software in the coming year) and attempting to re-municipalizing the city's water company, at the time of writing they were collecting citizens signatures so as to hold a referendum on the matter soon.

BEC have demonstrated that SMs can move from protest against local government policy, to actually taking power. If one city can do it, any city can do it, if citizens are organized and prepared to work and struggle hard for their beliefs. More cities are starting to at least try to create similar structures and deal with local concerns. There is no fixed correct way of how to make these projects work, but at least there are open lines of communication with the growing global network, as well as lessons to be learned from the experiments of others. This offers great hope that communities can organize themselves and start to create sustainable solutions. We will now turn to the city of Curitiba and see if similar projects are possible there.

3.3 CONCLUSIONS

The Global urban shift is underway. By 2050 75% of the worlds population will be urban dwellers. Brazils urban population is already 85%. Cities are the frontline for action to deal with the multiple crises humanity faces today, appropriate action is needed quickly to avert climate crisis and build resilience to deal with future shocks. Avoiding humanities destruction rests on our collective ability to fix our cities.

In the developing world, most urban change is happening in the periphery regions of cities, often with issues of social exclusion, invisibility, lack of resources including political representation, crime and insecurity. These regions are often in high-risk areas, like riverbanks prone to flooding, and environmentally protected areas. Any future urban solutions must engage with and be accessible to all citizens, allowing for local participation in the formation of public policy, as proposed and hoped for by Right to the City movements, the UNs SDGs and the recent NUA.

The term Sustainable Cities is long established, but seems to struggle to embrace newer concepts that cities must deal with today, such as resilience, regeneration and more. With detailed clarification, the still loose and undefined term of Ecocities, could replace the Sustainable Cities term by incorporating all current concepts, along with what might come in the future, to encapsulate the utopian dream of what cities could be. Recognizing that recent mega “Ecocity” projects in Asia have negatively affected this concept, the dissertation suggests that the phrase should be reclaimed. The dissertation regards those projects as failed Ecocity projects because their urban strategies were designed only for a small percentage of the population. Ecocity projects must be for all citizens and not the few. They must deal with the full city, with all the associated challenges, and not just create a gated community or region, isolated from the wider urban system that it is part of.

This dissertation examined how the GEN ecovillage methodology, practice and global community could form the basis for a true global Ecocity network. GEN consists of more than 10,000 communities, including two urban districts, with all continents of the planet represented. Their network is a culmination of 20 years of experience by a diverse global community. GEN desires a planetary scale up, to where “every village is an ecovillage, every city a green city”, without losing their core values of being locally owned, participatory processes. The challenge of today is to understand how such a vision can be implemented globally in today’s massive cities.

Regarding what structures and processes can facilitate such a reality; this dissertation examined Municipalist, Confederalist, Communalist solutions. From theory developed over decades by Murray Bookchin and Social Ecology activists, to the lived realities of the Kurdish anti-capitalist and feminist society being constructed in Rojava in war torn northern Syria, to the evolving experiments currently happening in the 8 “Rebel Cities” of Spain. Diverse projects that claim to be building a truly democratic feminist revolution. With power structures challenged and civic institutions opened up, allowing for, inviting and accommodating Active Citizenry: Society can be structured politically in a fractal like fashion, with decisions moving upward from the local to the global: from communities in the streets, to neighbourhoods, region, city, Bioregion. Building on GENs existing structures, an Ecocity network would consist of communities within communities; a confederation of clusters of ecological neighbourhoods, communicating with each other non-hierarchically, organizing both horizontally and vertically through local assemblies. Any node within the structure is both local and global at all times, with attention paid to dynamics of participation to ensure equality is paramount. In this way, all citizens co-create the cities of the futures, from the bottom up; city planning becomes a community facilitation process.

To get the ecological part correct in our communities and planet, we need to get the economic part correct also, as they are both intrinsically connected. Any ecological economic system must live within the limits of life on earth, this means breaking from the current economic model of endless growth. This dissertation examined how the current system of global capitalism under the present form of Neoliberalism is not compatible with such a sustainable system; therefore a break from capitalism is required. The base of such a transition centres on reconstructing our relationships with energy, most of all; oil. While many forms of alternatives exist, this dissertation sees the future cities model as being part of a PostCapitalist solution for the planet. It suggests pathways based on the creative descent responses to the twin challenges of global warming and peak oil that are being developed by various groups all around the planet today, inspired by PC and related philosophies, including GEN, Transition Towns, GAIA education, Degrowth and Agroecology.

Citizen Participation is the key to achieving these objectives by building local accessible solutions based on shared economic, educational, political and cultural values. The challenge is to multiply existing solutions and connect the communities. Thereby greening the cities, fixing our cities, fixing our planet: Humanities Survival.

4 CASE STUDY

This chapter concerns the Case Study of the dissertation and is divided into 6 sections. It begins by investigating Brazil's urban development, including a detailed examination of Curitiba's urban evolution and identification of current challenges faced. The main area examines recent urban actions of civil society groups that are active in the Curitiba RMC whose area of work includes a focus on Urban Sustainability and Citizen Participation. **Methodology** (3.1) outlines how the steps by which the investigation is carried out. **The Urban Context of Brazilian Cities** (3.2) presents a summary of Brazilian urban development and outlines current challenges faced in regard to Urban Sustainability and Citizen Participation, it includes a subsection relating to similar issues for Curitiba city. **Local Responses From Curitiba** (3.3) explores the development of responses in recent years from Citizen Movements in Curitiba to create a more sustainable city. This section is further divided into a number of subsections to explore various aspects of this topic, including an overview analysis of 30 selected groups. From this, 3 selected groups are investigated in more detail, all of which are receiving, or have received, some form of international support: **Case Studies: 3 Groups currently active in Curitiba** (3.4), with a subsection for each group. **Results & Data Analysis** (3.5) explores the responses from questionnaires shared with each of the 3 groups. The data is shared in the form of tables, maps, images and written text from dynamics during the PAR process of investigation. Finally there is a **Conclusions** (3.6) section to present a summary of all the issues covered in this chapter and conclusions reached upon analysis of the responses with the 3 selected groups.

4.1 METHODOLOGY

In the Case Study section, the research process is qualitative with the author acting as an active participant, learning from, with and by movements & groups, where possible. The author is using a Participatory Action Research (PAR) approach inspired by Social Ecology principles, seeking to understand the world by trying to change it, collaboratively and following reflection, with the author learning about, with and from groups currently active within the Metropolitan Region of Curitiba.

For the study there are two levels of analysis. Firstly, a summary of Brazilian urban development is presented, based mostly on reading of contemporary texts, which includes a brief history of Brazilian cities and which outlines current challenges faced. This section includes an overview of the urban development of Curitiba RMC, outlining challenges the city faces today, in regard to Urban Sustainability and Citizen Participation where possible. Personal observations are also included.

Secondly, where the study methodology used is participative-observation with focal groups, which is a tool that helps retrieve important information by decision makers and stakeholders. An examination is made about recent and current urban actions in Curitiba RMC that attempt to create a more Sustainable City through Citizen Participation. This section is further divided into 2 distinct sections:

- C. Overview: Identify recent actions in the city, to understand what is being tried, by whom, where and why, in relations to groups of Civil Society attempting to make change. This analysis is used to present an initial basic overview of the current situation in Curitiba RMC. From this, a selection is made of a minimum 25 groups (25+) currently active in the city, to examine each in more depth, as an individual entity and also examining the relationships between groups, how they interact with each other and with other entities. Establish if they are receiving, or have ever received, International support for their local initiatives. If yes, in what forms. An in depth analysis will be presented of the current situation based on the authors experiences working with some of the groups and some interviews carried out with some of the key actors, as outlined by PAR, using tables, maps, images and written reports.
- D. 3 groups from the 25+ list will be selected for more in-depth investigation. All of which are receiving, or have recently received, some form of foreign or international support. Having been already analysed initially in step 1, they will now receive a questionnaire and the author will engage in further participation with their actions and carry out spoken interviews with different communities of participants, where possible (Core team, volunteers, participants on urban actions, communities affected by urban actions). The results will be shared using tables, maps, images, author's reports from participation on actions and written reports from the interviews carried out with some of the key actors.

Groups that have some form of international connection or support, means:

- A) They are currently receiving, or have received, financial investment, resource support, or people assisting in local actions in Curitiba for a period.
- B) They are a local group of an international body.
- C) They facilitate programmes locally that are developed outside Brazil.
- D) Other, that they define, that meets authors and coordinators satisfaction.

The list of 25+, groups active in Curitiba RMC explored by the author is the following list (TABLE 11). The author had some contact with some groups prior to start of dissertation, but most were investigated between March 2016 until March 2018.

TABLE 11 – LIST OF 25+, GROUPS ACTIVE IN CURITIBA RMC

#	NAME OF GROUP (TRANSLATION)
1	350 Brasil
2	A Rede Social Brasileira por Cidades Justas e Sustentáveis (Brazilian Social Network for Sustainable and Fair Cities)
3	Bicicletaria Cultural (The cultural bikestore)
4	CASLA (Casa America Latino / Latin American House)
5	Centro Cultural Humaita (Humaita Cultural Centre)
6	Cicloiguaçu (Associação de Ciclistas do Alto Iguaçu)
7	Circo de Democracia (The Democracy Circus)
8	Code For Curitiba
9	Coletivo Mão na Terra (Hand in the Earth collective)
10	COURB (Collaborative Urbanism)
11	Curitiba em Transição (Transition Towns Curitiba)
12	Curitiba Lixo Zero (Zero Waste Curitiba)
13	Dona Clara Occupation
14	Garibaldis & Sacis
15	Horta Comunitária de Calçada Cristo Rei (The sidewalk community garden of Cristo Rei neighbourhood)
16	Instituto Nhandecy
17	Jardim das Amoras Brancas (The Garden of the white berries)
18	Laboratório de Cultura Digital (Laboratory of Digital Culture)
19	Movimento Nossa Curitiba (Our Curitiba movement)
20	MST (Movimento dos Trabalhadores Sem Terra - Landless Workers' Movement)
21	Nacion Pachamama (Nation Pachamama, Mother Earth)
22	OCEL (Ocupação Cultural Espaço da Liberdade - Cultural Occupation Space of Freedom)
23	Parque Gomm (Gomm Park)
24	PCS (Programa Cidades Sustentáveis) - Sustainable Cities Programme
25	Peacelabs (Previously Cheer For Peace)
26	Praça de bolso do ciclista (Cyclists pocket park)
27	Sociedade Global (Global Society)
28	TETO (Roof)
29	Vagas Vivas (Live parks – ex car park spaces)
30	WRI Brasil Cidades Sustentáveis (World Resources Institute Brazil – Sustainable Cities)

SOURCE: ORANIZED BY AUTHOR

In assessing the actions of groups, the author has been taken inspiration from the **4-D Whole Systems Design Framework (4D)**, as outlined by the GAIA Education group, which stems from ideas developed by GEN. This technique offers a helpful analysis regarding the construction of sustainable communities. GEN and GAIA outline 4 “key pillars of sustainability”, which are: Social, Economic, Ecological and Worldview. From this, the author attempted to engage with groups, to assess their actions, structure and philosophy, as well as their levels of inclusivity in allowing for the author, a normal citizen, to engage and participate. The author assessed aspects of each group in criteria outlined below (TABLE 12), with each pillar further divided into a few key areas. The authors subjective results are shared later.

TABLE 12 – ASSESSING LOCAL GROUPS IN CURITIBA

PILLAR	CHARACTERISTICS
Social	6 factors: 1) Does the group examine social problems in Curitiba RMC and offer solutions, in theory. 2) Do the actions of the group happen in areas with social problems, thereby attempting to involve local communities in actions to bring about desired change. 3) Facilitating participation, what is their level of openness in regard to allowing normal citizen participation, this includes economic accessibility. 4) Group Participation: How open are they in allowing for new participants to actively engage in core areas of decision-making and creation of new projects, have they a procedure for this. 5) Collaboration with other groups and entities currently active in the city. This can be either them participating in actions of other groups, or better, where they initiate actions or joint actions together with other groups. Do they supporting other groups and actions, if so, how. (6) How well does the glue (as outlined by Albert) of their movement work, is it sticky, is it social. Are there celebrations, profound moments, and experiences.
Economic	4 factors: 1) Economic participation. Do people have to pay to participate in actions. If no, have they practices to assist those in difficulty. Do people pay to officially join group. Do core members receive a form of payment for “work” done for the group. Do some people solely survive financially from “salary” working with group. 2) Sustaining projects. In terms of sustaining their project, how are they doing currently? Do members struggle to participate, or do people participate in spare time. Do they have direct financial support from outside, if so, what factors must be met to keep receiving funding. 3) Ecological Economics: Do they seek radical ecological solutions, do they advocate anti or post-capitalist solutions. Do they use alternative forms of economic support within their group or with other groups. Are they open to, encourage or support systems like exchange. Can they support people to find employment in areas of interested. Do their actions focus on these issues. 4) Where are their actions happening, who is their target community. Do they engage with all sectors of society, or closed technical groups.
Ecological	4 factors: 1) Individual group response to the crises. To what level has their actions created actual impact in Curitiba RMC and the various communities. 2) Have they implemented actual change in the urban realm, in regard to urban sustainability. 3) Is their philosophy expanding into wider audiences, are similar projects happening. 4) How fully do their actions answer align with topics covered in investigation of the dissertation.
Worldview	4 factors: 1) Are their actions shifting attitudes in some sectors of Curitiba / Brazilian mentalities. 2) Is their movement fighting against something, or are they constructing practical solutions they are attempting to implement. 3) Do they have a Political component, do they engage in the public discussion on their issues. 4) How effective is their communication ability, in external communications & internal group dynamics also

SOURCE: ORGANIZED BY AUTHOR

3 groups from the 25+ list were selected for more indepth investigation because of the important work they are doing which is seen as most relevant to the focus of this disseartation. They also all meet the following criteria: 1) They are currently active in Curitiba RMC 2) Their work focuses on urban sustainability 3) They facilitate citizen participation 4) They have, or had, an international connection.

The 3 groups from the 25+ list selected are:

4. Cicloiguaçu
5. Instituto Nhandecy
6. TETO

Each group was asked to respond to the following questionnaire (TABLE 13):

TABLE 13 – LIST OF 10 QUESTIONS FOR THE GROUP OF 3

#	QUESTION
1	Describe your actions in the RMC of Curitiba
2	What are your connections with International Institutions, or in what ways have you in the past, or do you now, receive international support for your local actions.
3	Are there any factors or directives from the international institutions to which your group must adhere to, so as to receive this international support? If yes, please outline them.
4	Have you observed any problems arising between the factors your group must adhere to, to receive international support, and demands from the local community?
5	Regarding the dimension of action, where exactly are your actions happening, in the municipalities of the RMC or in the communities?
6	Is it possible for you to do what you do without any form of interaction from State or municipal government?
7	Do you know other groups acting similarly in other parts of Brazil or abroad? Are they under the same guidelines? Do they face similar problems?
8	Regarding funding of your project, do participants need to pay to participate. Do current members of the group receive payment for their work or do they volunteer their time freely. If the public have financial problems for paying for events, actions, programmes, do you have some form of a financial assistance programme?
9	Regarding increased levels of participation with your group, do you have structures to enable new comers to quickly assume roles or carry out tasks, do newer participants get to participate in core decision making processes?
10	What are the chances that you will open out your actions to other areas in the RMC or Brazil?

SOURCE: ORANIZED BY AUTHOR

The results are shared using tables, maps, images, author's reports from participation on actions and written reports from interviews carried out with actors.

A detailed description of each of the 25+ group is shared in the Appendix.

4.2 THE URBAN CONTEXT OF BRAZILIAN CITIES

This section presents a summary of Brazilian urban development and outlines current challenges faced in regard to Urban Sustainability and Citizen Participation, it includes a subsection relating to similar issues for Curitiba city.

4.2.1 Brazil's Urban Development

The image below of the downtown area of Curitiba (IMAGE 21) is typical of many Brazilian cities; a small historic core surrounded by roads and high-rise towers.

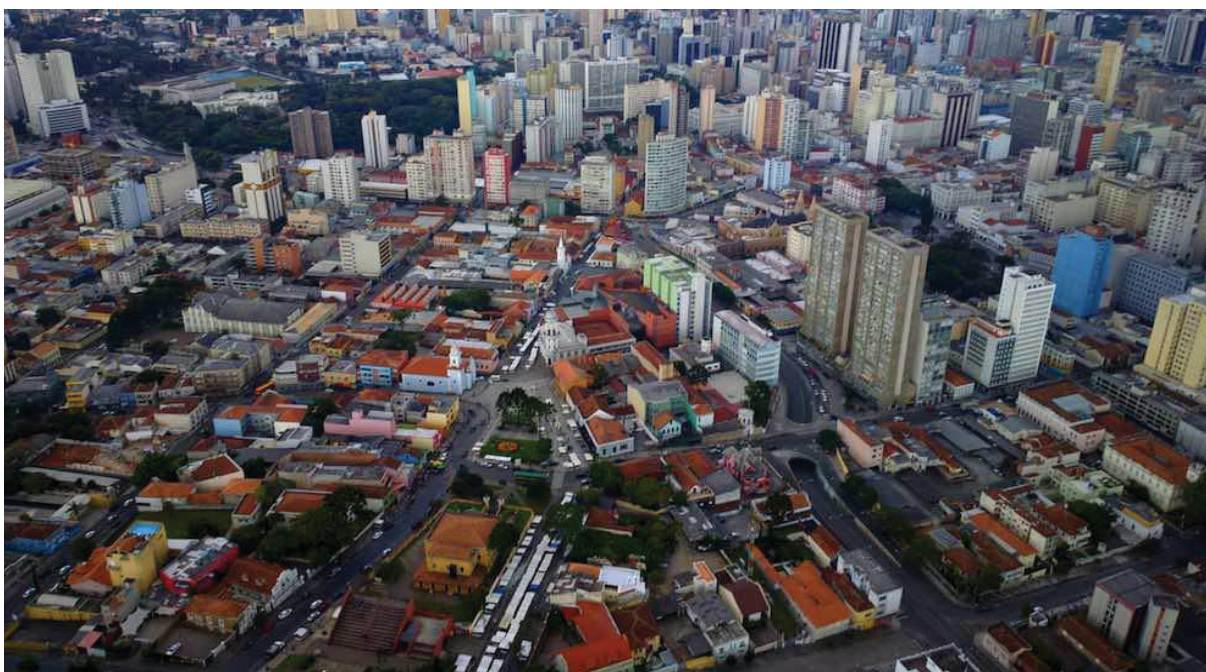


IMAGE 21 – DOWNTOWN CURITIBA & HISTORIC CENTRE
SOURCE: EDUARDO PA/GETTY IMAGES/FLICKR RF – GUARDIAN 2016

Brazil is the world's fifth-largest country by area, and the sixth-most populous country. Physically covering 47% of Latin America, with over 208 million people, it has an urban population of 85% (PNAD, 2015). The Southeastern Urban population is currently 93%. A recent UN study showed that Latin America is the World's most violent region, with 1 in 3 homicides happening there, even though the region has just 8% of the world's population (MEXICO CITIZENS COUNCIL, 2017). The study of the world's 50 most violent cities for 2016, found 43 from Latin America, with Brazil the highest, at 19. A 2017 report by the Brazilian Institute of Geography and Statistics (IBGE) concluded that Brazil is far from having "Sustainable Cities". IBGE

Geographer Maria Lúcia Vilarinhos explains that in the large cities “the best quality coexists alongside the worst. It is a Brazilian structural phenomenon present everywhere. The city, by attracting population, has its surroundings overwhelmed, which generates precariousness, since it is not a planned growth” (IBGE, 2017. Authors translation). Brazil’s urban divide is shockingly abrupt and was perhaps best communicated through Tuca Vieira’s 2004 photograph (IMAGE 22) from São Paulo. Divided by a wall, is the Paraisópolis *favela* (informal settlement) next to its wealthy neighbour, Morumbi. The photo symbolises the stark contrast that still exists between São Paulo’s rich and poor, but also within all of Brazil. Speaking 13 years after taking the photograph, Vieira outlined what the photograph symbolised for him personally:

It is clearly an illustration of social inequality, maybe the biggest problem for Brazil and Latin America. The unjust and brutal difference between rich and poor, inherited from slavery, is in the origin of many other problems – violence, below-par schooling, prejudice and many other issues. Inequality means that someone who is poorer is obliged to work more, so they have no time to study, which impacts on their education. As a result, they are not able to develop the critical and political awareness necessary to transform their own situation. Add to this the absence of any sense of the collective responsibility or solidarity among the privileged in Brazil, and you have a closed circle that is very difficult to break. (VIEIRA, 2017)

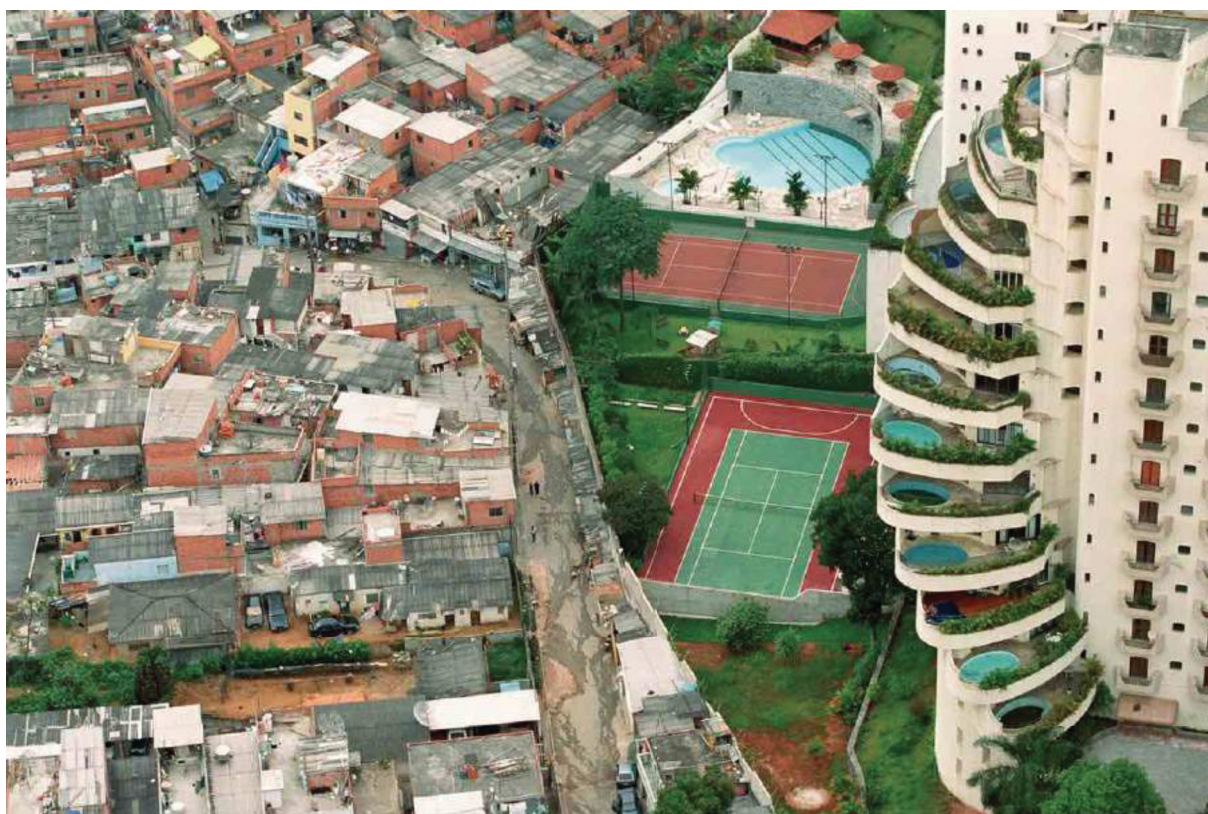


IMAGE 22 – THE EXTREMES OF BRAZILS CITIES
SOURCE: TUCA VIEIRA / FOLHA DE S. PAULO, (2004).

The inequalities in Brazil today, can be seen as a country still struggling to deal with an unjust and very violent history, especially regarding racial issues. Brazil was the last country in the Western world to abolish slavery in 1888. About 40% of all Africans brought to the Americas ended up in Brazil, whereas the United States received about 10%. The Portuguese system of domination included a *Pelourinho* (Pillory), a whipping post, in the central square of the big towns, in front of the church. Here slaves were tortured in public and other slaves made watch the bloodletting. Unlike in other parts of Latin America, Portuguese forces did not meet very strong opposition to their taking control of indigenous lands, whereas Inca, Amara and Mapuche communities in the Andes fought the Spanish for long periods. From 1500 till the present day there has been a genocide of the indigenous peoples in Brazil. Hinton (2002) estimates that between 1900 and 1957, over eighty indigenous tribes were destroyed and the overall indigenous population declined by over 80%, from over one million to around two hundred thousand. Brazil today is a mix of its indigenous (also referred to as Indians), Black African, European, Arab, and Japanese communities. Despite claims it is a "post-racial" country, the white Brazilian population still occupies the top of the Brazilian society, while Blacks, Indians and mixed-race people are largely found in the poor population. Brazil was primarily an area for exploitation of resources and plantations for European markets. Brazil's first capital city Salvador (1549–1763) was the chief port city for the sugar cane industry, until the capital moved to Rio de Janeiro (1763–1960) to facilitate the export of newly found gold and diamonds from the nearby state of *Minas Gerais* (General Mines) and the wealth of São Paulo grew directly from it being the centre for coffee production.

In 2010, about 6 percent of the Brazilian population lived in slums, areas of irregular occupation definable by lack of public services or urbanization, which IBGE calls "subnormal agglomerations" and most Brazilians refer to as *Favelas*. The name *favela* comes from the creation of a community on a hill in Rio de Janeiro, the *Morro da Providência* (Hill of Providence), after the War of Canudos in 1897. Poor Rio conscripts returning from the battle were granted permission to construct a settlement, located between a quarry, the port and Rio's main train station, which soon got known locally by a similar named area they had camped at during the war, *Morro da Favela* (Hill with the oily plant). In time, it became known as simply favela. Over time, as poorer communities were pushed out or left the city centres, they began to move to communities like this and build their own homes with whatever

materials were at hand. Normally these communities were in precarious geographical areas, in Rio many favelas exist on the sides of steep hills. Due to large population migrations to the cities in the 1970s, many very poor people unable to find places to live moved into the favelas. In later decades with arrival of drugs, criminality grew in some of the favelas with rival gangs engaging in extreme violence for control. Since 2008, many favelas in Rio have been fully taken over through a “pacification” process by the Police. Both *Amnesty International* (2015) and *Human Rights Watch* (2016) claimed Rio de Janeiro’s military and civil police were the world’s most violent forces, routinely torturing and killing citizens during arrest, especially young black men. Recently the army were deployed into Rios streets, due to a sharp increase in criminality since the worsening of the economic crisis of recent years. Much stigma exists around the favelas, but most Brazilians are unfamiliar with the realities of life in these communities. Not all communities suffer from serious violence, in most cases residents chief concerns centre on improving local infrastructure. Rio’s largest favela, Rocinha, is a very tightly packed urban entity (IMAGE 23) that is estimated to house around 300,000 inhabitants. One very interesting characteristic is the selfbuild nature of these communities, where buildings get extra floors added on vertically when resources allow for it. A kind of DIY compact urbanism, that spans decades.



IMAGE 23 – ROCINHA FAVELA, RIO DE JANEIRO, BRAZIL
SOURCE: JOE CAPRA, (2015)

While slow to mirror world population demographics initially, Brazil now has a far sharper exponential curve (IMAGE 24). Chief factors for this include migration to Brazil and also the relatively recent phenomenon of the accelerated process of urbanization in Brazil, caused by internal migrations that occurred during the second half of the 20th century (BRITO, 2006, p.221). The 1970 demographic Census indicated that the urban population surpassed the rural population for the first time. Ignazzi shows that this rural-urban migration is still underway (IMAGE 25), with rural numbers in constant decline for each decade, while urban numbers continue to rise sharply. The urban population is concentrated in high densities mostly around Brazil's coastal cities, with some exceptions in inland cities (IMAGE 26). The 2000-2007 map clearly shows the ongoing rural-urban migration from the poorer countryside to the booming cities. Ignazzi (2015) notes "During the last century, the demographic centre of gravity of Brazil has moved from the Northeast to the South". São Paulo is Brazil's economic and industrial centre and it keeps growing. Its metropolitan area of over 20 million inhabitants is the most populous city in Brazil and both the Western and Southern Hemispheres. Geographers such as Tolosa (2005) even talk about a *RSPER Megalopolis* (Rio/São Paulo Extended Metropolitan Region) that "includes the medium-sized cities on the 500-kilometer-long transport axis between Brazil's two largest metropolises, as well as the important industrial area dominated by Campinas; with a current population of 37 million" (DAVIS, 2006, p. 11). Ultramari & Firkowski (2012) outlined characteristics of Brazil's 1970-2010 urbanization process:

TABLE 14 – BRAZILIAN URBANIZATION PROCESS (1970-2010)

YEARS	CHIEF CHARACTERISTICS
1970s	Metropolization began after 1964 Military coup. Green Revolution led to expulsion of small rural farmers who migrated to big cities. Metropolitan Areas, planning laws & Industrial Sectors introduced. Modernisation improved Living standards. Loans given by World Bank
1980s	Return to democracy. End of international investment. National economic crisis. Difficulties in government to respond to urban demands. Basic advances in transport network, education, health. Continued migration led to peripherization, growth of favelas and increased violence. Felt to be a lost decade
1990s	Apparent success of the Neoliberal model due to Thatcherism and Reaganism. Arrival of new communication technologies. Loss of faith in the state. Growth of private sectors role in urban management. Creation of third sector of NGO's. Development of ecological urbanism
2000s	City as market / business. Socialist workers party PT won 2002 elections, introduced Right to the City into law. Negative impacts of neoliberalism and privatisation were exposed; severe social problems existed due to lack of investment in huge marginalised communities. More participative forms of urban management were explored and priority funding was given to social action programmes in areas of housing, health and education

SOURCE: SOURCE: ULTRAMARI & FIRKOWSKI (2012). ORGANIZED BY AUTHOR

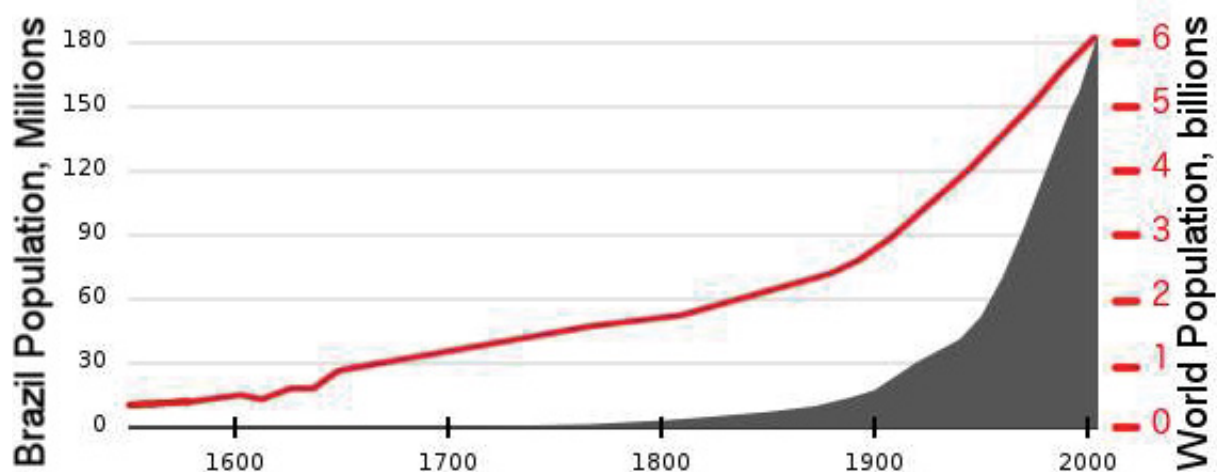


IMAGE 24 – POPULATION GROWTH 1550–2005: BRAZIL & WORLD
SOURCE: IBGE DATA, WIKIPEDIA, ADAPTED BY AUTHOR

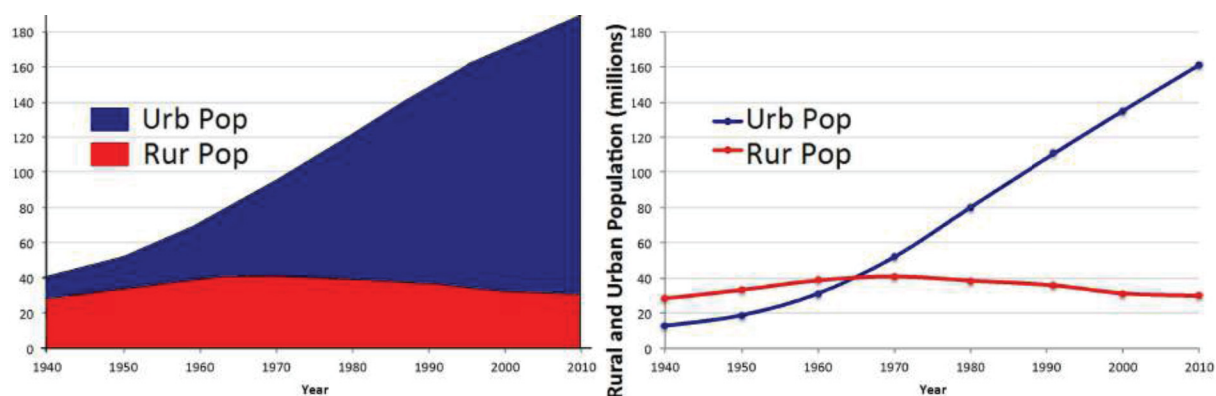


IMAGE 25 – BRAZILIAN RURAL - URBAN POPULATION (1940 – 2010)
SOURCE: IGNAZZI, 2015 (ADAPTED BY AUTHOR)

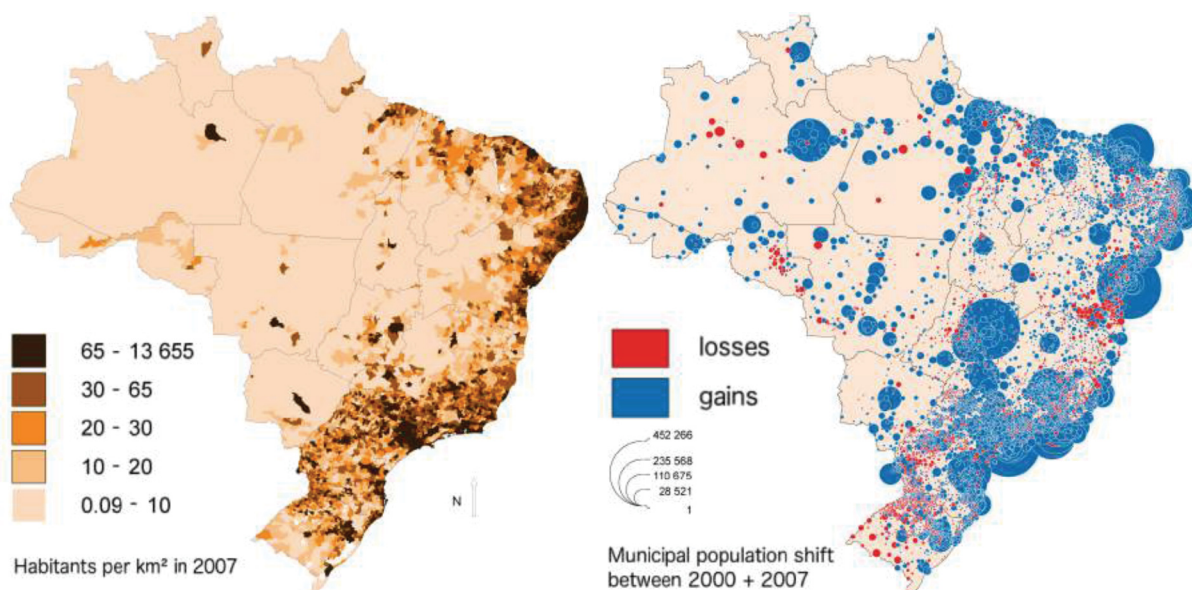


IMAGE 26 –L) BRAZIL POPULATION DENSITY R) BRAZIL URBAN SHIFT 2000-2007
SOURCE: IBGE DATA, HERVÉ 2008 & 2007. TRANSLATED BY AUTHOR

To give a sense of perspective on just how violent Brazil is, Galka's 2017 map (IMAGE 27) comparing homicide rates for 2015 outlines how Brazil, in red, had as many homicides as all the blue countries combined (59,080 vs 59,012). Violence, or the threat of it, greatly affects Brazil's public realm. Over recent decades, the fear of attack, robbery or kidnapping has resulted in decreases in the use of public parks and streets of many cities and increases in new security controlled, consumer shopping centres. The world's biggest fleet of helicopter taxis, traveling from roof to roof, was in São Paulo, where children of the very wealthy rarely experienced public streets, parks, or the beach in their early years. Fear of and avoidance of the public realm affects the vitality of street politics and can cause community fragmentation. In the big cities, much social interaction of the middle and upper classes happens in security controlled bars and restaurants, shopping centres, or at a Brazilian barbecue in a *Sala das Festas* (Party room), in a tower block condo of the gated communities.

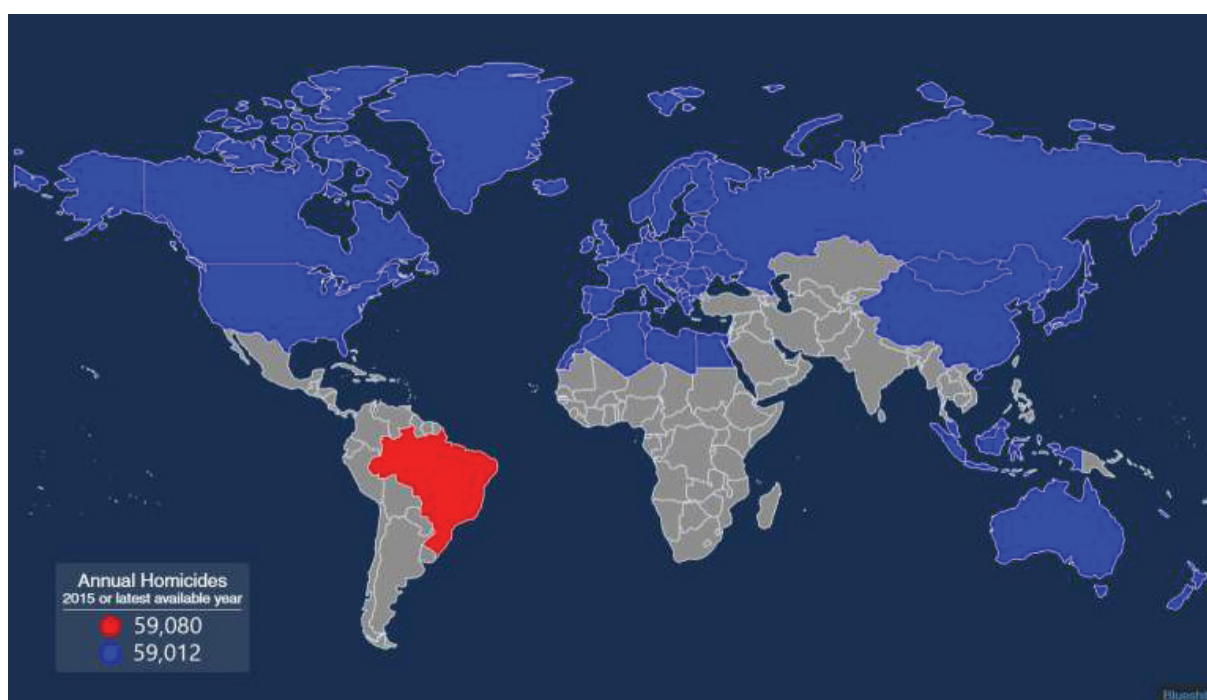


IMAGE 27 – BRAZIL'S MURDER RATE IN A GLOBAL PERSPECTIVE
SOURCE: GALKA, 2017

Brazil has attempted to face its challenges over many years to build a more just country. Advances in popular struggles and SMs for much of the 20th century led to fears that the country was too left leaning. A 1964 military coup installed a military dictatorship until Democracy was restored in 1985. In 1989 the Brazilian Workers' Party (PT) implemented the first full Participatory Budgeting (PB) process in a major

city, in Brazil's most southerly capital city Porto Alegre, as part of its programme to develop radical, participatory forms of democracy. The success of PB in Porto Alegre led to its implementation in over 100 municipalities by 2001. As a result of many years of popular struggle based on R2C, Brazil passed *The City Statute* as federal law in 2001, which provides land access and equity in large urban cities. Porto Alegre was the location of the first World Social Forum (WSF) in 2001, which became an integral part of the post N30 SMs global network fighting against capitalism. In 2002, the PT won Brazil's national elections and began a series of leftist reforms, similar to other Latin American countries, during the *Pink Tide*. The PT governed Brazil from 2003 until the controversial impeachment of Dilma Rousseff in 2016. They introduced social programs to alleviate poverty and cater for basic human needs, including the *Bolsa Família* (Family Allowance) social welfare program in 2003 that provided financial aid to the country's poorest families and Brazil's first ever large scale public housing programme *Minha Casa Minha Vida* (My House My Life) in 2009.

From 2003, Brazil's economic performance improved and 40 million people rose out of poverty, due to increased employment options, improving living standards and investment in the country. In 2010, Brazil joined with Russia, India, China and South Africa to form *BRICS*, it also won the bids to host the 2014 World Cup and the 2016 Olympics in Rio. By 2014, the economy started to slow down and by 2015 Brazil was in its worst economic crisis since the 1930s. June 2013 Brazil experienced widespread protests in its cities, due to many factors including the rise of bus fares in São Paulo from R\$3.00 to R\$3.20. The protests were inspired by and used similar tactics to the Arab Spring, OWS and 15M. Some violence occurred in the streets between police and activists, but many demands were finally met, including reduced fares. In 2015 a new wave of "anti corruption" protests took to the streets, led mostly by conservative groups. This coincided with legal charges brought against President Rousseff, whose impeachment was seen as a coup by leftist SMs. Her replacement Michel Temer immediately began to implement what's seen as the world's harshest austerity program (ALEEM, 2016). Currently, with social problems worsening, the country is very polarized and tense. Presidential elections will happen next October.

From this basic overview of dynamics surrounding urban development and recent cultural history of this huge and complex country, we will now turn to explore the city of Curitiba in more detail. To understand what it has got right, what it has got wrong and what current projects are happening there to improve things.

4.2.2 Curitiba

The Brazilian city of Curitiba has been seen as a leader in the area of ecologically based urbanism in the past; being the location of Ecocity Builders 4th Ecocity World Summit in 2000, winning 2010's Globe Forum Sustainable City Award and The Ecologist magazine labelling it as **The Greenest city on Earth** in 2014 (BARTH). A little over 400km from São Paulo in the south of Brazil, it is a secondary city where large urbanization shifts are currently underway, as Davis notes (2006, p. 15): "In Latin America, where primary cities long monopolized growth, secondary cities such as Curitiba are now booming", referring to Villa & Rodriguez (1996, pp. 33–34). The Curitiba Metropolitan area (RMC) has seen nearly a tenfold increase in its population (IMAGE 28) in the last half century, with most urban growth happening in the *Mancha Urbana* (Urban Stain: MU) of the Municipality of Curitiba (Green outline) and smaller satellite towns around it that are included in an entity called the Central Urban Nucleus (NUC) of the city (Black outline). The RMC now comprises 29 municipalities (IMAGE 29), has a total area over 16,500 km² and a population of about 3.5 million (IBGE, 2010), making it is the seventh most populous in the country.

Founded in 1693, Curitiba sits on a plateau at 932 metres above sea level and is located 105 kilometres west of the seaport of Paranaguá. It is the coldest capital city in Brazil and has a climate similar to much of Europe, with cool evenings and nights. From the 1850s onwards, waves of immigrants arrived including Germans, Italians, Poles, Ukrainians and Japanese, settling mostly in respective settlements outside the centre where their home languages were spoken as first language until World War 2, when Brazil sided with the allies and began repression against Italian, German and Japanese languages. Curitiba's stereotype of a non-friendly city possibly stems from this past multi-ethnic and lingual diversity. The cities growing economy, based on industry and services, contributed to quick urban expansion from the 1960s as Brazilians from other cities and regions of Brazil migrated to the city. The popularity of a national TV series "Sonho Meu" (My Dream) and the cities "Model City" marketing campaign in the 1990s are also contributing factors in this urban shift.

In 1996 the United Nations Conference on Human Settlements (Habitat II) praised Curitiba as "the most innovative city in the world", it continues to be a city of innovation and creativity: Nationally, the home of Brazil's first university (UFPR: founded 1912, inaugurated 1913) and the location of the countries first pedestrian

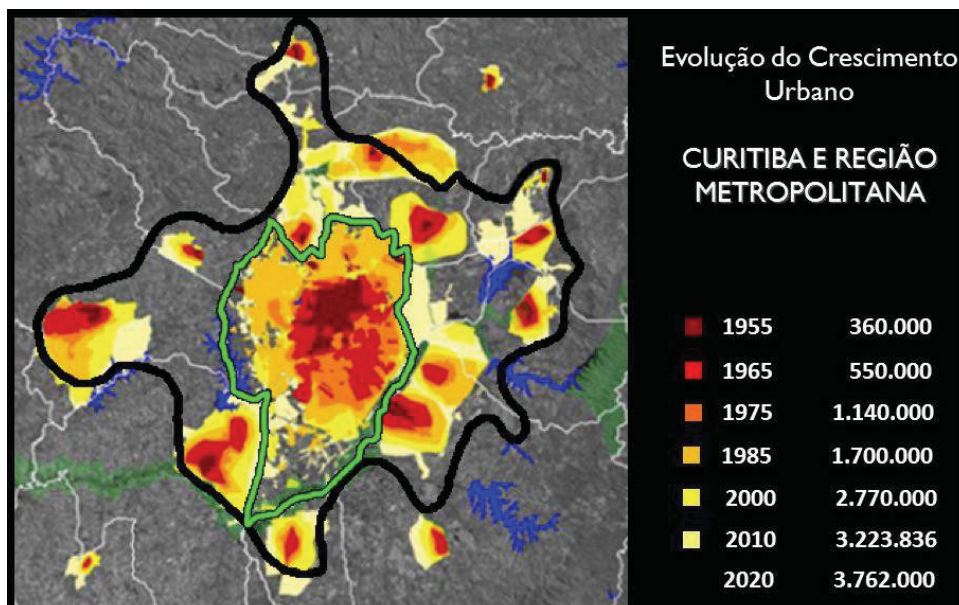


IMAGE 28 – POPULATION GROWTH IN CURITIBA RMC
SOURCE: IPPUC, + AUTHORS OUTLINES (2017).



IMAGE 29 – CURITIBA RMC
SOURCE: COMEC, 2009 + AUTHORS SCALING + UPDATE (2018).

only street (1972), Globally, the site of the worlds first Bus Rapid Transit (BRT) system (1974) and other bold ecological urban solutions designed under the watch of architect and three-time city Mayor, Jaime Lerner, between 1971 and 1992, and later governor of the state of Paraná. In 1965, Lerner helped create the city's planning agency (IPPUC), which proposed urban plans opposed to the car-focused urbanism of the day; such as the creation of the new capital city Brasília by architects Oscar Niemeyer and Lúcio Costa. Attempting to replicate the Brasília model, local planners and the mayor in Curitiba proposed demolishing the centre of the old town to make way for a new car viaduct, Lerner led a movement against the existing mayor's vision of a Curitiba for cars, and won, they saved the old city centre. Soon after their victory, Lerner was elected city mayor in 1971 and quickly began creating a different kind of city, based on the ample proposals drawn up with his team of planners and architects at IPPUC, which was based around a shared holistic urban vision, as Lerner notes:

It was a change in the conception of the city. Working, moving, living leisure.. we planned for everything together. Most cities in South America separate urban functions – by income, by age. Curitiba was the first city that, in its first decisions, brought everything together. (ADLER, 2016)

Lerner's first major victory was the pedestrianization of *Rua das Flores* (Flowers Street / November 15th street) in the city centre in 1972, in just one weekend. When hearing of a planned protest by drivers who planned to drive through the newly pedestrianized thoroughfare, Lerner enlisted hundreds of children to play in the street, giving them paintbrushes and paper, as a means to successfully block the protest. It worked; the street is still a thriving 1km long car free zone today. In 1974, Lerner and IPPUC began a project that was to become the first BRT system in the world. It was, in essence, a metro system at street level, created from necessity with a limited budget. New street arteries were designated bus only lanes for extra long buses, from the centre out to the municipal edges. As public use grew steadily, buses became both the cheapest and fastest mode of transport. By the 1980s, Lerner observed that the inflow and outflow of passengers was slowing down the speed of the buses at each station, so in 1991 they edited the system: They created the now famous raised "tube" station system (IMAGE 30) that allow passengers to move straight from the station into the bus; made longer buses to add extra capacity to the fleet; introduced a system of pre-payment on entrance to the tube, so that bus drivers

did not have to issue tickets and collect money on the go. Although developments of BRT systems outside Brazil happened slowly, highly efficient BRT systems are now intrinsic parts of mixed mobility plans in more than 300 cities around the world today.



IMAGE 30 – CURITIBA BRT SYSTEM WITH STREET TUBE STATIONS
SOURCE: ALAMY, (2016).

The Ecologist article does not claim Curitiba is the most ecologically advanced city on earth, which it is not, but refers to the fact that, at 52 square meters per capita, Curitiba had the highest number of official green space per person for any city in the world. When Lerner took office Curitiba had only .5 square metres per person and only one park, the Passeio Público. Lerner and his team developed a series of parks and city gardens and took steps to stop the main river Iguaçu from being channelized with concrete walls, allowing its edges to become public parks which doubled up as floodplains for short periods after heavy rains. Similar floodplain parks were created along the 2 chief north-south flowing rivers of the city; Belem and Barigui (IMAGE 31) to create Park São Lorenzo and Park Barigui, both of which incorporated small dams to create artificial lakes, both are now highly used popular amenities in the city. In other areas of the city, Lerner applied what he called “Urban acupuncture”; small urban modifications to provoke positive change in the wider area. Most notable examples of these are the compact Botanic Gardens and specific projects in old abandoned rock quarries near the city edge that had rich lush trees

and buildings inserted to create amazing architectural spaces, most notably *Unilivre* (University of the Environment) and *Opera Arame* (The Wire Opera). Another example of the Municipal creative solutions attitude in these architecture projects in the parks was the use of treated, wooden poles used as the primary building material, which had recently been taken down by the energy company, when substituted for concrete poles. Curitiba also developed innovative solutions to recycling under Lerner, as Power outlines:

Recycling in Curitiba is perhaps the most radical reform of all. In 1989, residents in a nearby favela were dumping their trash in surrounding rivers and fields, as there were no collections from their narrow streets. Lerner arranged for a truck to visit the favela at fixed times each week, and residents' rubbish was exchanged for bus tickets, football tickets and shows. Soon, the locals were cleaning the rivers and fields of old rubbish to sell. Schoolchildren were given new plastic toys for old bottles and bags in a scheme called "Garbage that's not garbage". (POWER, 2009)

Commendable actions have been taken to create a mosaic of green spaces both around and within the urban areas of Curitiba municipality and the wider RMC (IMAGE 31), as specified by the 12 different categories of the complex Conservation Units (UCs) system developed by the National System of Nature Conservation Units (SNUC) throughout Brazil since the 1970s. 2 UCs, Passaúna (18) and Iguaçu (22) form buffer edges around the rivers of the west and southeast of the municipality, while the RMC is completely crossed east to west through a series of green zones and Parana State is nearly bridged by a series of UCs from North to South. Citizens living within UCs can also co-create management plans for how their communities can exist, along sustainable living lines, within these areas. These bio threads allow critical lines for free movement of fauna, but they can also be developed for humans in the city to easily connect with their surrounding natural biosystem regions. With nearly 90% of the municipal boundary of Curitiba being formed by 4 different rivers (IMAGE 32), all with indigenous names, the city has developed strategies to attempt to protect and preserve floodplains which act as the main drainage system of the metropolitan urban territory and are also important regional biodiversity corridors. These waters travel 1320km downstream to form part of one of nature's wonders of the world, the giant waterfall at Foz do Iguaçu. 6 river basins make up the geographical structure of the city and investigations are underway to explore the basins fractal like sub basins, as possible areas for eco neighbourhoods.

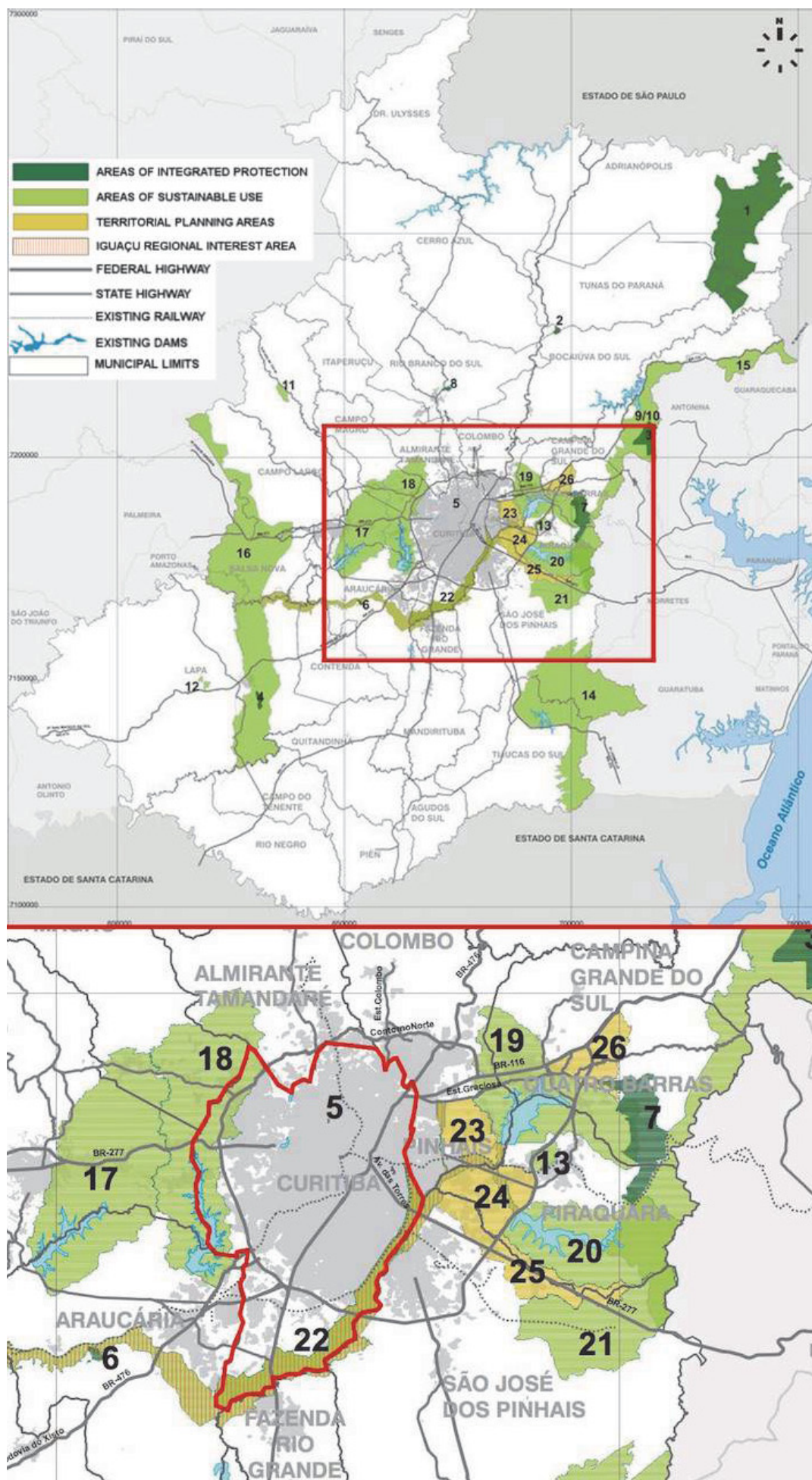


IMAGE 31 – STATE CONSERVATION AREAS IN CURITIBA RMC (+ DETAIL)
SOURCE: COMEC, 2010 (DETAIL, OUTLINES & TRANSLATION AUTHOR)

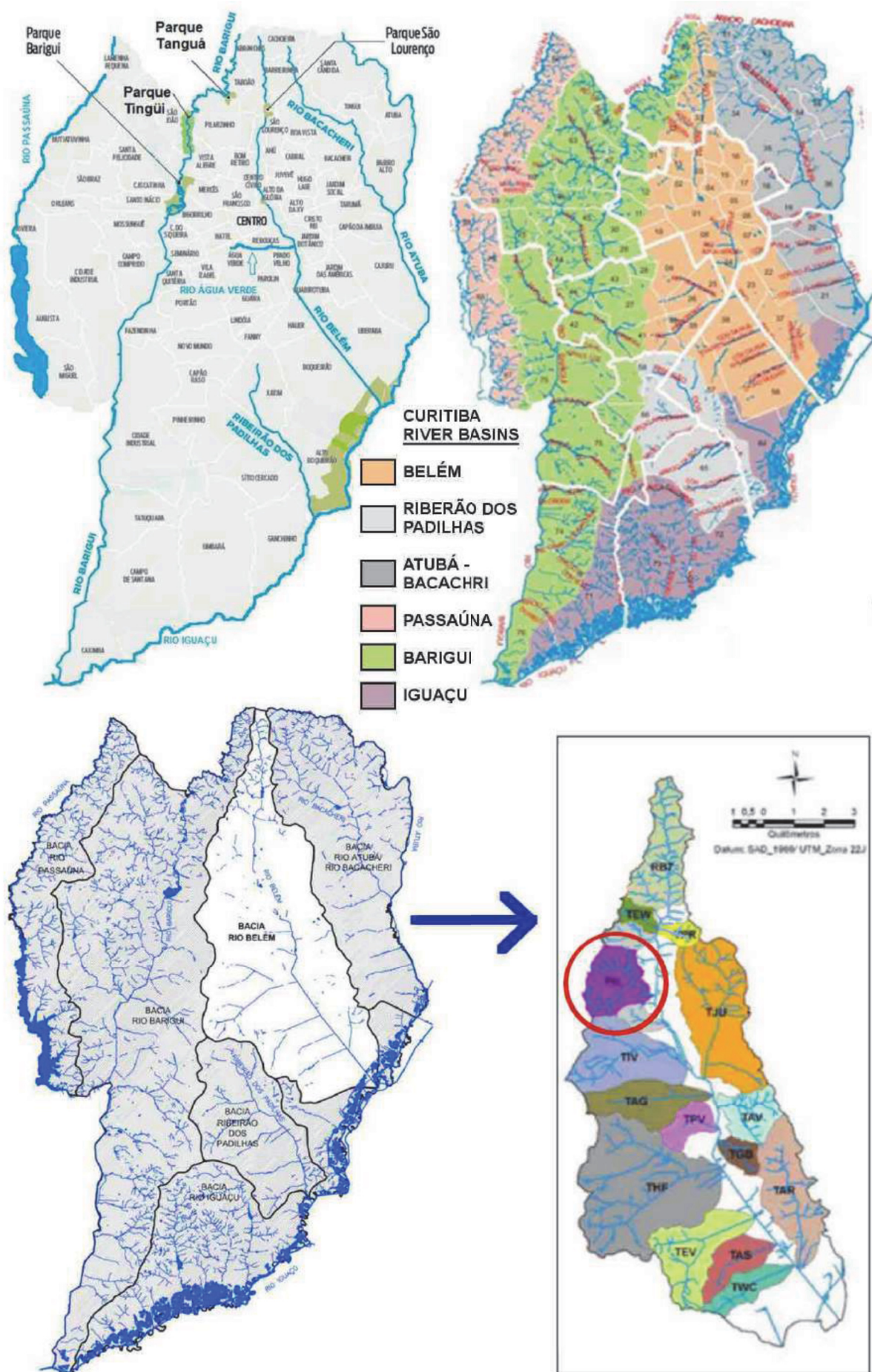


IMAGE 32 – CURITIBA RIVER BASINS + RIO BELEM DETAIL
 SOURCE: 1: GAZETA DO POVO. 2 & 3: IPPUC. 4: CÓRREGO DO AVIÁRIO (2011)
 ARRANGEMENT & CIRCLE AROUND “ECO BARRIO RIO PILARZINHO”, AUTHOR, 2018

In a positive step to make citizenship easier, Curitiba City Hall created *Ruas da Cidadania* (Citizenship Streets) in each of the 9 regions of the municipality in the mid 1990s. These were giant buildings, mostly with the same architectural language of red painted walls and yellow vaulted roofed walkway and sports zone. Their aim was to decentralize public agencies, facilitating the population's access to various services in the areas of health, justice, policing, education, sports, housing, environment, urbanism and social work. Many of them were constructed right next to the busy public transport terminals, where a large number of bus lines converge, as is seen in the first *Rua da Cidadania*, in the Boqueirão neighbourhood, with an area of 20,000m², inaugurated on March 29, 1995 (IMAGE 33). In the city centre location City Hall opened the first *Restaurante Popular* (Popular Restaurant) in 2007 to offer cheap quality food to its poorer citizens and those on the streets at a price of R\$ 1 (25 cents €), as well as offering courses, workshops and lectures on Healthy Food, Hygiene, Storage, Conservation, Integral Food Utilization and Family Budgeting. There are now 5 of them throughout the city and similar programmes exist in other Brazilian cities. Since 2015, food is now served at R\$ 2 (50c €) due to rising costs.



IMAGE 33 – RUA DA CIDADANIA & BUS TERMINAL, BOQUEIRÃO
SOURCE: URBS (2018)

Curitiba's 52 m²/person figure was only for the municipality of Curitiba in 2014, not the wider MU, NUC or RMC. While very positive that such high figures are the reality for this municipality, the same high level of green spaces does not yet exist in neighbouring municipalities. If we are talking about the city, we need to clarify what is the limit of this entity; this dissertation sees the wider metropolitan area, the RMC, as "the city". With rivers forming most of Curitiba's municipal border, collaboration on joint projects for shared green areas could lead to a high level of interaction between the various municipalities of the MU, leading to a more coherent whole in the wider city. Until recently, this was not the case, but in 2015 the 3 neighbouring municipalities of Fazenda Rio Grande, Araucária and Curitiba collaborated to create the first metropolitan mosaic in Brazil (IMAGE 34), the *Refúgio do Bugio* (Bugio Refuge). It is the largest Wildlife Refuge in an urban area in Brazil, with an area of 1764.8 ha. of wild forest, divided between the 3 UCs, sheltering 112 species of birds and 20 species of mammals, among them the *Bugio*, a red monkey. Curitiba's UC, the Bugio Reserve, is 827.8 ha and represents the largest urban UC in Brazil. The Refuge contains mostly wild areas for free movement of fauna, but also has some public areas for people to enter and to connect with nature, where monkeys and capybaras can be seen. Some communities are living in the Caximba section.

In March 2015 City Hall released A vision for the future city, which "resumes the concept of long-term planning that in the past was a hallmark of the city" (CITY HALL, 2015), for the next 50 years of Curitiba's urban development. It included new axes for collective transport to cities in the metropolitan region and "measures to make the city more resilient to climate change". the plan was accompanied by a schematic map (IMAGE 35) on which the Bugio Reserve can be seen as well as more linear parks along all the chief city rivers as outlined above (IMAGE 32), which when developed, will enable citizens to access bio threads within the city, to travel along to connect with the UCs at the municipal edge and from there proceed deeper into the nature areas in the RMC and wider regions in Parana and other States. The map also builds on Lerner's earlier strategies to develop high density living areas around the 5 chief BRT corridors, as well as the newly constructed *Linha Verde* (Green Line) corridor, the Northeast – Southwest highway that cuts through the city, which was recently modified to include a new BRT axis in the centre, around which new areas of the city can be developed for housing, thereby increasing Curitiba's urban density, a key component in creating more Sustainable Cities.



IMAGE 34 – BUGIO RESERVE

SOURCE: L: SMMA. 2015 C: GAZETA DO POVO. 2015 R: AUTHOR. 2017

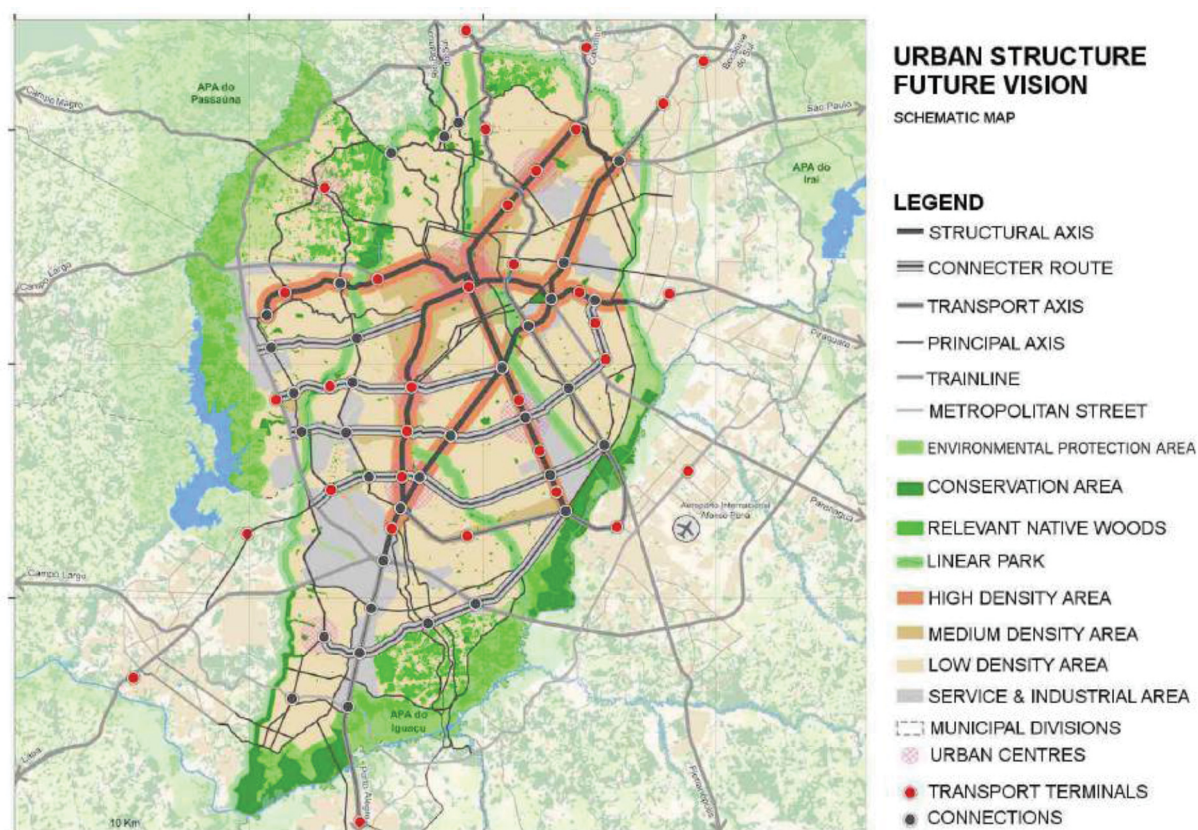


IMAGE 35 – CITY HALL VISION FOR CURITIBA

SOURCE: CURITIBA CITY HALL. 2015, TRANSLATION AUTHOR, 2018

Above are Curitiba's main positive developments, but negatives also exist that warrant consideration. Regarding Curitiba's record high green area, some so called green spaces are little more than left over corners with a bit of grass and a plaque naming the mayor under whose term the few metres were added to the cities grand total. With the election of new mayors, often existing projects have their funding diverted into new projects, often the new mayors pet project. This is very frustrating for local focus groups and communities and a huge waste of resources, where vast funding is procured for starting projects, but for final steps and subsequent upkeep costs get cut. An example of this was the very ambitious *Projeto Viva Barigui / Biocidade* (Long live Barigui Project / Biocity), whose grand aim was the revitalization of the Barigui river basin, which housed a third of the cities residents, to clean 45km of one of the cities main rivers. It received R\$ 85 million investment from the French Development Agency, but from 2014 onward there was little written about the project. Oddly, the only mention of the project on the municipal website is written now in English (BIOCIDADE, 2010). While globally celebrated for its public transport bus network, the reality is problematic: "Despite its reputation for BRT, Curitiba has the highest vehicle ownership rate per capita of any Brazilian capital city: 0.63 cars per resident, more than twice the national average of 0.27" (SCRUGGS, 2013), this does not imply that car owners do not use the public transport network, but as a 2012 report stated "in recent years, the system has become overcrowded and expensive, pushing people into their cars.. News reports revealed that usage of its famous BRT system has decreased by 14 million rides in the past four years, or 4.3%" (HALAIS, 2012). Scruggs (2013) notes Frigo's criticisms of the BRT system:

It terminates at the city limits rather than crossing over into the poorer suburbs. While suburban bus lines pick up passengers at BRT terminuses, there is no integrated fare system, which means lower-income commuters who live farther away from the central city end up paying more for their ride. (SCRUGGS, 2013)

Halais says: "The blame, according to critics, lies with URBS, the city agency in charge of managing the system, which has failed to adapt to changes in usage patterns and evolving demographics" (HALAIS, 2012). Since 2012, the price for a single fare rose to R\$ 2.20 in 2014, a key factor leading to the national 2013 demonstrations, and has risen sharply to R\$ 4.25 at time of writing. Curitiba's region and neighbourhood structure in the Municipality seems unbalanced (IMAGE 36) also.

Curitiba

Divisão administrativa

144



IMAGE 36 – CURITIBA MUNICIPALITY, REGIONS & NEIGHBOURHOODS
SOURCE: CAU-PR, 2017

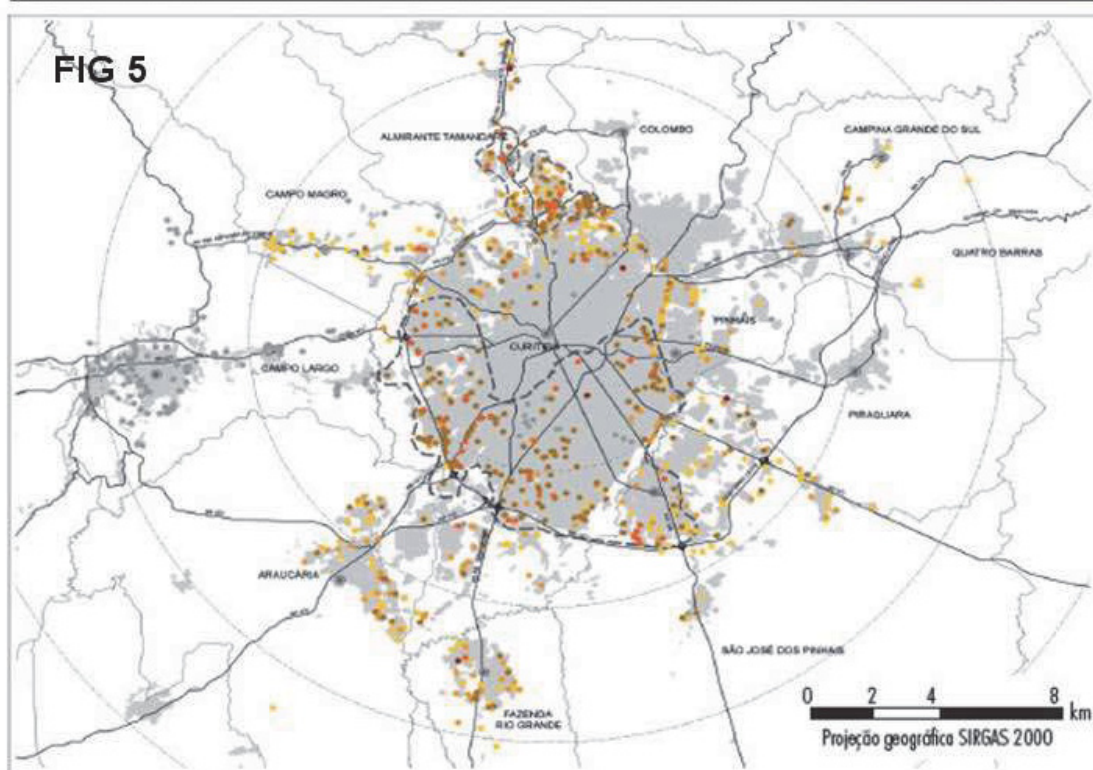
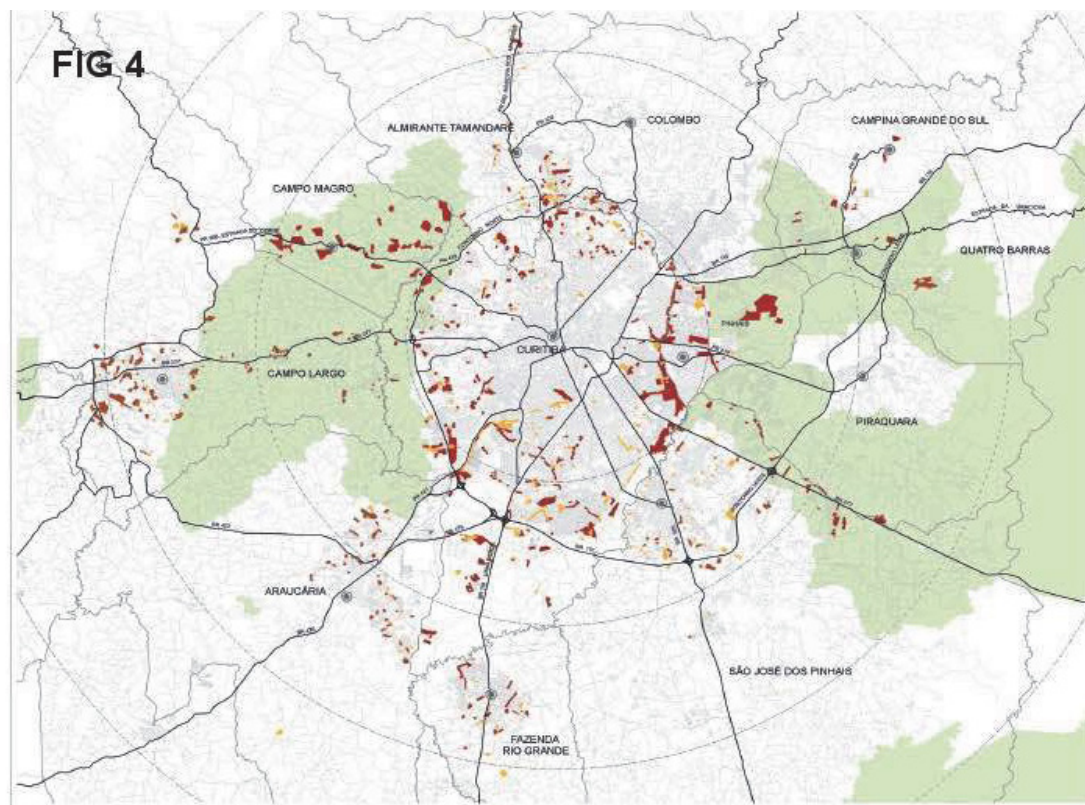
9 separate regions exist with a number of greatly diverse sizes of *bairros* (neighbourhoods) within, which seems difficult for organization of community issues at the local level. For example the Bairro of *Cidade Industrial* (Industrial city) (Purple) is roughly the same size as the entirety of the *Matriz* region, within which all 18 *bairros* around the city centre exist. Every 10 years, by law, the Mayors Office revises the Municipal Development Plan, which is “a sociopolitical pact of society towards a more humane, participative, innovative, inclusive, functional, sustainable city that offers quality of life for the population. It should present a vision of the future for the coming decades” (CURITIBA CITY HALL, 2018). In 2014-15, with the assistance of IPPUC, they engaged in a citizen consultancy process to agree on urban issues, but urban activist groups argue that the process was far from participative, that the public discussions that happened in each of the cities 9 regions, were merely the council outlining decisions already reached, as opposed to participative processes to facilitate maximum citizen input about the creation of zoning regulation for the future of their communities, which questions “The hope of positive results for democratic participation in the process of making the city” (MOURA, 2005). The organized front tackling this situation *Mobiliza Curitiba* outlined the City Halls shortcomings:

Over the years Curitiba has developed recognized urban solutions that contributed to the construction of a "model city" image, but did not face the socio-spatial inequality on a metropolitan scale, segregation, housing precariousness and unequal distribution of the effects of urban and environmental problems. (MOBILIZA CURITIBA, 2014)

Finally, we turn to perhaps the most critical area of criticism in relation to Curitiba, the social. Mendonça (2002) argues that the cities “Ecological Capital” title was really just a successful marketing campaign created by the city in the 1990’s, which highlighted successful municipal policies regarding quality of water, air, green areas and solid residues, but failed to address already huge social problems the city faced, such as the growth of slums in the periphery of the rapidly growing city. Moura (2009) is also critical of this constructed image of the city that tends to erase other discourses, such as those of the challenges of the growing numbers in the urban periphery. While analysing the rapid urban explosion of the Metropolitan area in recent decades, Gustafsson & Kelly (2012) note how the city had to “adapt and adjust rapidly to changing conditions, despite a municipal budget that did not expand nearly as quickly as the demands placed upon it”, which helps explain the level of

disconnection between the different municipalities that make up the wider city within the MU and RMC, especially in public transport (PEREIRA E SILVA, 2011; MOURA, 2009). The most vulnerable communities, with lowest incomes, living in the periphery of the city in the MU are the ones most affected by public transport price hikes and lack of a combined transport ticket. Brazil's high number of irregular occupations, also referred to as *favelas* in Brazil, is well documented, but Curitiba saw a huge increase in favelas since the 1980s and was listed in 2000 as the 5th highest municipality with the highest number of favelas (ALBUQUERGUE, 2007). This internal migration has greatly increased the population of Curitiba within the MU and has placed great demands on those 14 municipal councils within the RMC. This shift has also led to increased safety concerns due to social problems, such as crime, drugs, gangs and violence, which led to Curitiba entering the list of 50 most violent cities in the world for the first time in 2014 at number 44 (MEXICO CITIZENS COUNCIL, 2015) and reappearing in 2016 at number 49, based on rates of homicides per capita. Pereira & Silva (2011) note that many informal settlements are in ecologically sensitive areas (IMAGE 37) of the traditionally less developed areas of the South and Southwest of Curitiba, in vulnerable risk areas along the margins of the city's many rivers. Fróes (2017) examined one such community in Caximba, in the very South of Curitiba, which had environmental restrictions and very little urban infrastructure. She questions if such communities are included in the 'Sustainable City' model, noting how unresolved conflicts still existed and concluded that public policy doesn't seem to address the Right to the City for all its citizens.

Speaking in 2012 Irázabal stated "In the past 15 years Curitiba has rested on its laurels" (HALAIS, 2012). In 2009 she commended the early years since Lerner's time, but noted the "Top-down politics involved in Curitiba's urban design and planning processes" (IRÁZABAL, 2009, p.220) happened during the military dictatorship from 1964-1984. She felt the city was at a crossroads, urging: "Curitiba's government must involve citizens in the planning process in a more thorough way" (IRÁZABAL, 2009, p.220) to "relegitimize and continue the processes of urban design and planning that had such a brilliant start in the 1960s and a commendable implementation record from the 1970s to the early 1990s" (IRÁZABAL, Abstract, 2009). In subsequent years new urban Social Movements began to emerge, based on more participative forms of organisation and, at times, direct action. We will now examine the development of these Citizen movements in Curitiba in recent years.



Legenda FIG 4

- Assentamentos informais não atingidos por APPs e APAs
- Assentamentos informais em APPs e APAs
- Áreas centrais
- Vias principais
- Vias secundárias
- Limites municipais
- Áreas de preservação ambiental e unidades de conservação
- Distância da área urbana central de Curitiba - Raios de 10 km em 10 km

Legenda FIG 5

- 185 - 299 dom/ha
- 85 - 184,9 dom/ha
- 45 - 84,9 dom/ha
- 25 - 44,9 dom/ha
- 0,46 - 24,9 dom/ha
- sem informação
- Mancha de ocupação urbana no final da década de 2000
- Região de concentração do crescimento intensivo



IMAGE 37 – CURITIBA INFORMAL SETTLEMENTS (END 2000'S)
SOURCE: FIG 4: IN ENVIRONMENTAL AREAS. FIG 5: DENSITY IN RMC. SILVA, 2012

4.3 LOCAL RESPONSES FROM CURITIBA

This section explores the development of responses from Citizen Movements to make a more sustainable Curitiba in recent years. The dissertation explores the city as a living organism, looking for, identifying and analysing urban actions as cell-like entities, as possible catalysts for sustainable urban change. These actions can be moments, processes, projects, eruptions, or built changes in the urban realm. Here Capra's reflections on Systems thinking and complexity are remembered, in relation to the Theory of dissipative structures: "This spontaneous emergence of order at critical points of instability, which is often referred to simply as "emergence," is one of the hallmarks of life. It has been recognized as the dynamic origin of development, learning, and evolution" (CAPRA, 2007, p. 476). Seeing that "the focus is now shifting from the structure to the processes of their emergence" means that rather than simply analysing the architectural form of, say, an urban community garden, we seek to investigate it as a process; what dynamics gave rise to its formation, who sustains it, how and why, as well as exploring hopes for what it might lead to. Remembering also, that such an action, might lead to similar urban actions developing in rhizomic fashion in the city, as explored earlier (Page 70).

As stated, for this dissertation the author has used a PAR approach inspired by Social Ecology principles; seeking to understand the world by trying to change it, collaboratively and following reflection, with the author learning about, with and from groups currently active within the Metropolitan Region of Curitiba. From here on in, the author shares views expressed through dialogue with people involved in actions.

The analysis explored here seeks to understand the factors of who is doing what, where, why, with whom and how. The analysis examines both the actions of groups listed in the 25+ group, as well as the nature of these groups, which the author examines using the 4 criteria outlined earlier (TABLE 13, page 87). The 3 groups examined later (3.4) are also included in this section but specific analysis about them and their actions is left to that section. This section is not limited to the 25+ group, but reflects wider dynamics from actors in this area. The author defined 3 distinct subsections to explore: 1) 2007 and New Forms of Direct Action Movements. 2) Recent Greening the City actions in Curitiba. 3) Connecting Communities: Urban Actions as Catalysts for Change. The conclusions section involves the authors chart (TABLE 16) based on analysis of the 25+ group upon the criteria defined earlier.

4.3.1 2007 and New Forms of Direct Action Movements

Ongoing groups, social movements, projects, actions and calls on local government to facilitate wider citizen participation in Curitiba existed for decades, but it is hard to define exactly when real moments of impact began to happen. Similar to trends in Europe and other global cities, Curitiba saw the emergence of new youth movements in the early 2000s concerned about environmental issues and proposing change not in the traditional way of requesting it from above, but by taking peaceful direct action to attempt to implement it from below, in areas of anti car culture, cycling & gardening. Some of the groups grew out of the cities strong rock, metal and punk music scenes, within which many people first came into contact with anarchist ideas, most notably the *Jardinagem Libertaria* (Libertarian Gardening - JL) collective, who since 2007 planted native trees, both edible and not, around the city, without permission, and helped create a community garden in the Portão neighbourhood, with permission. Using the anarchist Ⓐ symbol in their blogs banner and the clenched fist holding a carrot (symbol of the *Food Not Bombs* project) on sprayed DIY signs left alongside the newly planted trees (IMAGE 38), they carried out their work of *Semeando as ruínas da civilização* (Sowing the ruins of civilization).



IMAGE 38 – 1ST LIBERTARIAN GARDENING DIRECT ACTION 2007
SOURCE: JARDINAGEM LIBERTARIA, 2007 (ARRANGEMENT, AUTHOR)

JL, like similar groups, existed as a loose collective that led to a small SM within the city, it did not create an official group, or seek a CNPJ (state reference number) instead it grew organically in an open way allowing for anybody being able to use the name for an action or project. It is not as active now, as people involved developed other projects, but is still a reference and sometimes actions today use the JL tag. Perhaps its most well known victory is *Jardim de Sofia* (Sofia's garden), where activists planted a number of native trees alongside the river Belem in March 2010 to mark the birth of the daughter of one of the chief activists Jorge Brand, more commonly known as Goura. Without permission, they carried out the action "Directly under the nose of the authorities" (GOURA, 2010), next to the centre of power in Parana State; the Iguaçú Palace in the Centro Civico neighbourhood. In 2012 the municipality officially recognized the green area and incorporated it into the city parks and gardens list. Writing in the local paper in 2012, Goura said about their struggle:

A city made for people, which considers the human scale, the speed of feet and the view of the horizon, is quite different from a city built for cars, or even a city that submits itself to the commands and counter demands of the real estate business. Curitiba does not seem to know exactly which category it fits into. A tree planting policy should be built with the effective participation of the residents. Children and schools can play a central role in this. Tree seedlings can be distributed regularly at street fairs, with planting instructions. All household organic waste can be easily turned into compost in our own homes to become soil for squares and sidewalks, significantly relieving the burden of landfills. In the end, the trees represent the cycle of life, the water, the air, and everything we ignore in our haste and folly. (GOURA, 2012, Authors translation)

Goura was subsequently elected as a city councillor in 2016, and while busy with official activities, still carries out open JL actions, including the planting of 40 more native trees in *Jardim de Sofia* last year on June 5th, World Environmental day, with other activists in the city and February 5th this year planted, with permission from the authorities, 13 native trees on the footpath outside the City council chambers.

World Carfree Day (WCD) 2007 was a pivotal moment for *Cicloativismo* (Bike activism) in Curitiba. A group called *Bicicletada*, a local word for bike ride, was set up in 2003 by Luis Patricio and other activists, inspired by the Critical Mass¹⁷ movement that began in San Francisco in September 1992. Since the 1970s, under Jamie

¹⁷ Critical Mass is a political direct action that happens on the last Friday of the month in hundreds of cities around the world, where a large number of cyclists meet up and ride together as one big group, to push for improved rights and infrastructure for urban cyclists.

Lerner, a few kilometres of bike lanes were constructed alongside the river Belem to connect a series of parks, but these were for leisure purposes only, not as a means of safe commuting to and from work or university. On September 22nd 2007, World Carfree Day (WCD), brave and bold activists carried out a direct action that has since acted as a catalyst for much urban and political change in the city, as Patricio notes:

Tired of the insecurity and the lack of space for those who didn't own a car and taking into account the indifference from the municipalities, a group of activists, supported by local residents at Alto da Glória neighborhood, decided to paint a cyclelane in one block. Before the act, the media and authorities were informed through an open letter that was signed by many residents and businessmen in the area. So, at the end of a public, pacific and leaderless bike ride that occurs monthly in our city, the "First Cyclelane of Curitiba" was painted by a group of approximately 50 people during daylight. (PATRICIO, 2008)

The 1-meter wide bikelane on *Augusto Stresser* Street had been painted with proper paint for asphalt, but the authorities painted over it some days after (IMAGE 39). Some weeks after, the bike lane was painted again during the first Commuter's Challenge event, again in a public action with the support of local residents and media coverage. This time the police turned up and 3 activists were arrested for an "environmental crime", charged and fined R\$ 750 each (250 €). Much momentum and a creative culture developed around the bike SM, which led to meetings between the bike activists and IPPUC, as well as much discussions in both the media and public realms about Curitiba's claim to be a "Sustainable City" without any bike lanes.



IMAGE 39 – CURITIBA'S FIRST STREET BIKELANE 2007
SOURCE: L: LUIS PATRICIO, 2008. R: GAZETA DO POVO, 2008

This direct action, or political stunt, was one of the many to happen in the first month long festival created in 2007 that was dedicated specifically to these urban issues: *ARTE BICI MOB* (short for Art, Bicycle & Mobility: ABM). Over the following 10 years the festival grew massively and is now supported by City Hall. Despite requests for assistance, *ABM* 2008 received no municipal support, so activists put together a calendar of small events, based on the basic principle: Whoever came up with an idea should be responsible to execute it. This included films, city walks, bike tours, urban art interventions, a photo exhibition and music concerts. ABM's focal point, WCD 2008, featured a debate about sustainable mobility with candidates for the upcoming elections to be City Mayor, followed by the monthly bike ride, which over 300 cyclists took part in. ABM now proudly declares that for Curitiba "September is the month for bicycles", ABM 2010 included:

The multimodal race (Commuter's Challenge) included a helicopter and a car, but the bicycle once again came out the fastest, cheapest and cleanest. The Federal University hosted a week-long seminar for participants ranging from architects to anthropologists, discussing the city's mobility issues. On weekends, Grupo Transporte Humano supported free bike workshops in public parks and private garages. Entertainment on WCD included live music at different crossroads, a fashion parade by Curitiba Cycle Chic and, of course, a successful Critical Mass ride. (PATRICIO, 2010)

Over the following years other bike movements grew and the discussions got more focused about what changes these loose cycling SMs wanted in the city, from these discussions it became clear that more formal structures would need to be created to realize some of the dreams of the diverse community. The *Cicloiguaçu* group was created in 2011 to specifically advance these urban mobility issues and from 2011 to the present major changes have been implemented in the urban realm of Curitiba and also in the wider municipalities. Also in 2011 the *Bicicletaria Cultural* was set up in a run down part of the centre of town. This offered a safe space to store bikes, a practical space for SMs to work and it served as an artistic centre to further promote and build up the cultural diversity around the bike SM.

2007 was a turning point in Curitiba due to these new urban actions and philosophies. Perhaps the impact of these actions was not seen at the time, but they have since been built upon to create an ever-growing culture seeking to transform Curitiba through open collaboration, inviting all citizens to participate in making their city. We will now explore these Greening the City steps of recent years.

4.3.2 Recent Greening the City actions in Curitiba

Since new direct action focused movements in 2007, Curitiba has started to be transformed through Social Movements based on radical ecology, citizen participation, inclusivity and a vibrant cultural movement to effect political change in the urban landscape. In recent years these movements have matured, won many victories and even began to occupy municipal institutions. With the growth of more community gardens and similar small-scale projects, new citizen networks are forming in the public realm, facilitating a much-needed face-to-face means of engagement that fosters trust. These new SMs organized in horizontal, leaderless ways, with the objective of carrying out more direct actions to inspire more people to do likewise, or to participate with them in future actions, as seen by the names of the 2 SMs noted above: *Bicicletada* (unauthorised bike rides) and *Jardinagem Libertaria* (Libertarian Gardening). Many initial actions went under the radar, but overtime their impact has multiplied greatly. Many movements are inspired by the Right to the City, seeking inputs from all citizens in making the city together, through active citizenship, which many believe leads to stronger, more resilient local communities. From hereon in, the dissertation will refer to these diverse actions as sharing a common objective: the Greening of the city. This vague term implies improving aspects of the cities ecological performance through public action, as opposed to urban changes made by technical teams from above. The main actions of recent years include (TABLE 15):

TABLE 15 – CURITIBA COMMUNITARIAN GARDEN PROJECTS, SINCE 2007

YEAR	NAME	CHIEF CHARACTERISTICS
2001	Casa da Videira	NGO. Christian & anarchist roots. Self-sustaining community living on livestock and urban agriculture. Began in Curitiba municipality 2001, left 2014, returned 2017. Founder C.Oliver now advising Curitiba city council on urban agriculture.
2007	Jardinagem Libertaria	"Libertarian Gardening": Unauthorized tree planting & attempts at community food gardens. Open social movement, inspired by anarchism & direct action.
2009 > ∞	Bananeiras do Juvevê	Man plants banana trees in front of house for food, shade & community space. 2017 fined. Community support, Mayor annuls fine, allows garden to remain.
2010 > ∞	Jardim de Sofia	JL activists planted a number of native trees alongside the river Belem, next to government buildings. 2012, municipality officially recognizes as urban garden.
2012 - 2017	Jardim das amoras	Urban Permaculture Laboratory 3km from city centre, in home of project owner beside Belem river. Ran paid courses & workshops. Difficult to financially sustain. Ran organic food exchange & had fruit forest, dry toilet, earthen oven.
2013 > ∞	Parque Gomm	Community direct action to block proposed new street into shopping centre. Self-organized space, mandala agrofloresta garden with native seeds. Had weekly cultural events for 3 years. City Hall had to engage in public discussion
2014 > ∞	Praça Ciclista	A reclaimed piece of public space, abandoned for 20 years. Community designed and built new cyclists square. Small area for food trees and flowers.
2014 -	OCEL	6-month occupation of empty 25-story building in centre by homeless, activist

2015		& periphery communities. Small urban community garden, public agro ecology classes. Cultural events: Hip-hop, murals & street parties. Ended with eviction.
2016 > ∞	Horta Calçada Cristo Rei	Community took over grass area of footpath for planting zone. Fined, received massive citizen support. Mayor met them, cancelled fine and stated he would change civic law to allow for planting similar gardens in all unused city spaces.
2016	Mão na Terra	Social Movement Based around Permaculture & Urban agroforestry. Space in centre, has gardens beside cycle path. Runs weekly events, food, music, films.
2017	Horta do Jacu	Abandoned public land occupied by river. Strong neighbourhood involvement, community compost recycling. 100+ cyclists visited for recent city music event,

SOURCE: DEVELOPED BY AUTHOR, 2018 (> ∞ DENOTES OPEN INDEFINATELY)

In 2013 a conflict about public space started, that led to the formation of the *Parque Gomm* community. They defined their struggle as GOMM vs GODZILLA, and although the fight was about a physically small space, it was actually about 2 different urbanisms: The controlled private domain vs the public realm. In response to a proposed new street for a luxury shopping centre through a public green space in Batel, local community activists occupied land, built a community garden in the shape of a mandala using agro ecology principles with a creole seed bank (IMAGE 40) and held cultural events every Saturday for 3 years. It was an incredible community catalyst, of a very diverse group of people from different regions of the city. This forced the council to listen to local demands and inspired similar, rhizomatic like, responses later in other parts of the city. In 2017, members of the Gomm community were involved in setting up 2 more community garden projects in the city: *Horta Calçada Cristo Rei* (IMAGE 41) and *Horta do Jacu*, as well as leading a campaign to support the threatened neighbourhood banana garden in Juveve (IMAGE 42).

These community gardens worked, and continue to work, on a purely voluntary basis, where people come and give their time freely to help create something they believe in, not expecting or seeking any financial gain from it. Other projects were set up by NGOs, with personal financial investment, which had similar goals to the gardens. In 2001, Claudio Oliver officially set up *Casa da Videira* (House of the Vine) as a self-reliant community based on urban agriculture, which included livestock, inspired by permaculture and agro-ecology. The project is a radical Christian church that seeks to transform society by working with the poorest people in society. Oliver, an anarchist, with family roots from the rich radical traditions of Catalonia and England, states: “We have no loyalty to the false god called “market” and its mediator “money.” Due to legal restrictions on farming in urban areas, they had to leave Curitiba in 2014, but returned in 2017. Oliver summarised their project:



IMAGE 40 – PARQUE GOMM COMMUNITY GARDEN
SOURCE: AUTHOR, 2015



IMAGE 41 – FROM THIS TO THAT, ILLEGAL STREET GARDEN, CURITIBA
SOURCE: HORTA COMUNITÁRIA DE CALÇADA CRISTO REI, (2017).



IMAGE 42 – WANDERLEI IN HIS BANANA GARDEN, JUEVE
SOURCE: RPC CURITIBA. 2017

For years, our church focused on serving the so-called poor, working with homeless people, youth groups, and in community development. Even with good results, however, we came to realize that having church and social ministry as two separate efforts resulted in a sort of spiritual schizophrenia. We were not living with those we wanted to serve. In fact, we were a bunch of well-intentioned, middleclass people crossing the city to do something we all believed was good. After deeper reflection on the scriptures, we felt called to move our church from its original location in the Bom Retiro neighborhood of Curitiba, to Villa Fanny, a very poor neighborhood – not to only help them, but also to mend our own divided minds and actions. Still an institutional church, we adopted the motto: “We do not have a social ministry anymore; the church is the social ministry to the world.” In Villa Fanny we found new work: we gardened, taught classical music, offered art classes, formed multilingual choirs, addressed environmental issues, started soap making, composted, and eventually transformed a parking lot into a garden with more than three hundred species – a place that teemed with life and the sounds of children. (Oliver, 2015)

A similar project set up was *Jardim das Amoras Brancas* (The Garden of the white berries). It was a “Laboratory of Urban Permaculture” located 3km from the city centre, beside the *São Lorenzo* park and the Belem river. The project was set up by Suryen Choinski and it existed from 2012 till 2017 in a rented house with a front and back garden, which were both turned into food production zones. The house had an open shared living space, which people rented, and a public zone for activities. Workshops and events that happened in the space included: dry toilet, fruit forest, vegan pizza oven, artistic events, cinema club; organic food exchange, Kundalini Yoga classes, holistic therapies, Reiki, Seed Bank, natural foods, vegetable garden, Libertarian Gardening, organic production. In the end the project finished up for a mix of reasons, including financial difficulties and Suryen moved into the countryside.

The later Case Study section deals with specific details of more initiatives and victories for *Cicloguaçu*, including the *Praça Ciclista* (Cyclists Square) project (Page 144) that occurred in 2014 and transformed a corner derelict for 20 years into a new public space through community design and building of the space. Next to the square was a 25-story building which was also derelict. Nearing the end of the *Praça Ciclista* project, this huge tower and its neighbouring area at ground level on rua São Francisco were entered and occupied. For a half year a radical project existed here, named *Ocupação Cultural Espaço da Liberdade* (OCEL - Cultural Occupation Space of Freedom) (IMAGE 43). A living space was created by and for homeless people in the tower, with support from urban activists. The group organised horizontally and used direct action as a form of political action, to highlight the fact there were derelict buildings throughout the centre of the city and a growing homeless community. The

collective created an urban community garden at ground level with weekly agroecology classes, as well as hip-hop and street art events, with many groups coming into the centre from the periphery of Curitiba. In May 2015 the group were served an eviction order and left without any confrontation with the police. At time of writing, the building is abandoned and the ground space, where lush fig and maracuja trees once existed next to growing food, has been levelled and is now yet another city car park.



IMAGE 43 – OCEL TOWER OCCUPATION & COMMUNITY GARDEN POSTER
SOURCE: OCEL. 2015

Horta Comunitária de Calçada Cristo Rei (The sidewalk community garden of Cristo Rei neighbourhood) began when a couple that had participated in *Parque Gomm* decide to create a local community garden in the grassy area of the footpath in front of their apartment block in the city centre. Over a few months, with the help of their diverse network of friends, they turned the 50-metre strip into one of the most biologically diverse planted areas in Curitiba. With seeds and planting techniques coming from Agroecology, Permaculture and indigenous knowledge, especially thanks to Rodrigo from the *Multiplica* group, and art workshops from various groups, the garden became a very active urban space. Then the council said their action was unauthorized and that they had to rip it all up, or face a fine. They resisted and were supported by large sections of the city population and a big debate raged in the media about gardening and sustainability. On Wednesday 12th of July, the collective were invited to City Hall to talk to the mayor, along with the Juveve Banana garden group who had also created a garden without permission outside their front door

some time back. This resulted in Mayor Greca annulling both fines and committing to changing civic laws to allow such projects in future, which means all the green strips of the city which in the past had to be grass only, can now be food production zones. This was seen as a massive victory for direct action and people power and was rightly celebrated the following day when the “Walk for a 100% edible Curitiba” event happened, as part of the Ecocity 2017 Festival. In late 2017, the UN Food Gardens Initiative, in partnership with UN-Habitat, hosted a showcase of small scale urban agriculture initiatives in the Americas. 13 submissions were selected to represent the Americas, including this physically small project, based on the following 5 criteria:

1. Sustainability and innovation
2. Community engagement and capacity building
3. Food security
4. Youth involvement
5. Resilience

Nearly a year to the day after the above action, another gardening direct action happened to create *Horta do Jacu* (The Jacu’s garden, a type of hen). Publicly owned land, that had been derelict for over 15 years, was occupied in the *Bom Retiro*

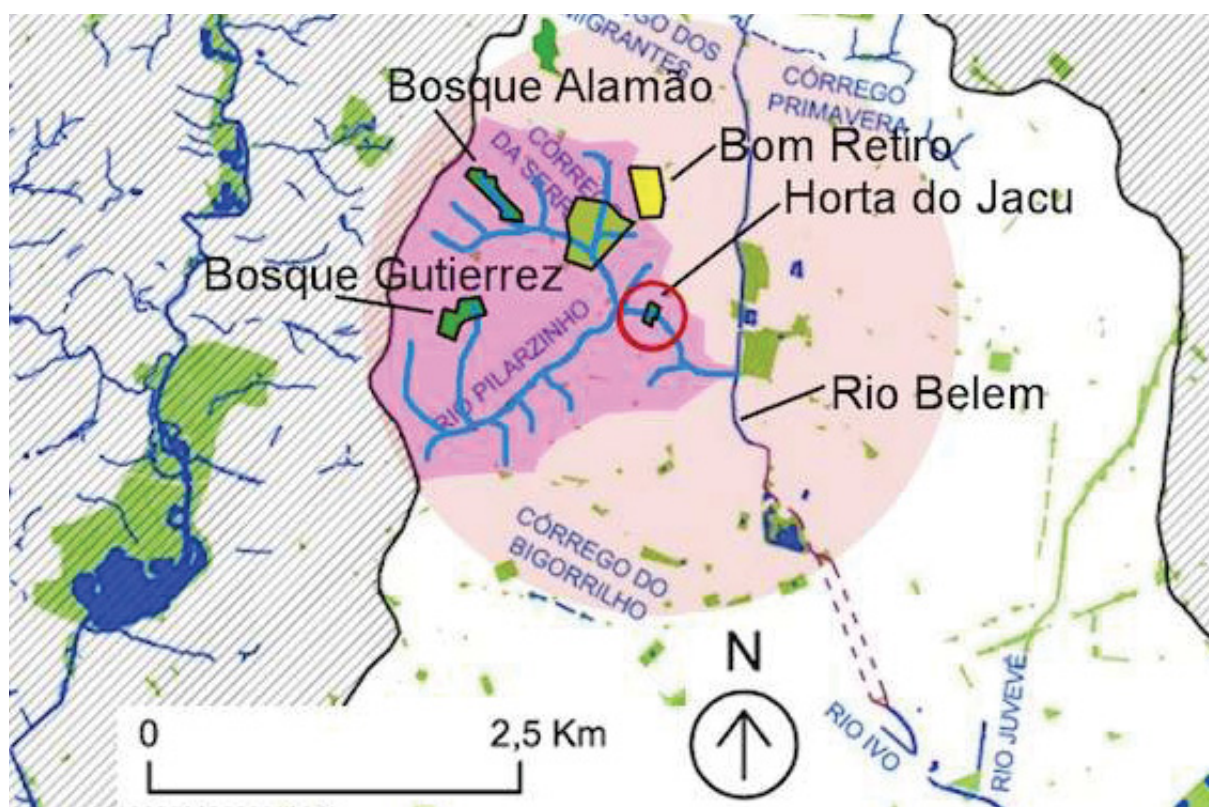


IMAGE 44 – HORTA DO JACU COMMUNITY GARDEN AND POSSIBLE ECO NEIGHBOURHOOD
SOURCE: IPPUC, 2011 (EDITED BY AUTHOR, 2018)

(Good retirement) neighbourhood. The site has a tributary of the Belem river (IMAGE 44) running through it (see earlier map of city, Belem river basin and micro basins on page 103) called *Rio Pilarzinho* (River of the little pillar). The occupation happened after Gomm activists who lived in the area talked with more neighbours about carrying out such an action, one resident knew this area of land was in public ownership. It had been without a gate for many years, people dumped rubbish inside and it had become an area for drug use in recent years. On 16th December, without asking the council for permission, activists entered the land, cleaned up the rubbish and cut down high grass to begin their community garden. 2 months later and it has developed food beds designed with agro ecology principles, mixed creole seeds, a compost system which is being used by many local neighbours, a large open area which serves as a public or kids play area, with a big old tree in the middle, a stage, an area for fires and a hill, which the activists call Jacu Pichu (a play on Machu Pichu). In February there was a civic music event, where over 100 cyclists visited 4 points in the city to watch live music, the garden was the last point and there was a terrific atmosphere. There has been no official dialogue with the council, but a core group has formed and is quickly developing projects. The fact that the river goes through the site is very interesting and a future biophelic urban project could be developed here, connecting walking routes along the sections of the Pilarzinho river which are still open. There have also been initial discussions about how the garden could act as a catalyst for an *ecobairro* (eco neighbourhood) plan for the river basin of the pilarzinho, a size of about 5km² (outline in pink in map above). Within this area are 2 very special woods; the *Bosque Alamão* (German Woods) and *Bosque Gutierrez*, which has a natural water fountain from an underground reservoir, with very pure and clean drinking water. People come from around the city to fill water bottles here. In Gutierrez woods there is also a memorial to Chico Mendes, the famous Brazilian environmental activist who fought and died defending the Amazon rainforest in 1988. Also in the park is a major NGO space, the Brazilian headquarters of the 350 movement, which many groups use. Also in this possible eco neighbourhood is the currently disputed battle for a new park; *Parque Bom Retiro*.

What is clear from these 3 community garden projects is that while their principal objective is food production, each has allowed for a huge amount of cultural events to happen too. More than that, activists from each project all speak of how they know so many more people now too. These projects build trust and community.



IMAGE 45 – FOOD SHARING AT PARQUE GOMM
SOURCE: FAETUSA TEZELLI & GOTO, 2015



IMAGE 46 – COMMUNITY GARDENING FOR ALL AGES
SOURCE: UN FOOD GARDENS, 2017



IMAGE 47 – GARDENS MAKE COMMUNITY
SOURCE: UN FOOD GARDENS, 2017



IMAGE 48 – GARDENS MAKE WARRIORS
SOURCE: HORTA DO JACU, 2017

These images (IMAGES 45-48) show aspects of the diversity of the gardens: from group sharing of organic food, children in the community participating, turning the street into an outdoor cinema zone and the creation of diverse new relationships.

Goura's election to public office in 2016 marked another milestone, when activists moved from occupying streets and derelict urban spaces to occupying municipal institutions¹⁸. Continuing with a shared vision based on radical ecology and citizen participation, now new tools and infrastructure are at hand to Curitiba SMs. The *Câmara Municipal de Curitiba*, City Hall, is where city laws get passed, but recently it has become a place for open public discussions about issues of high importance. In the last half year there were two main Extraordinary Public Meetings; the first concerned how to improve all aspects regarding the cities contaminated rivers, the second was in regard to Urban agriculture. On November the 10th, leading activists came to share ideas with each other and the public at large. One of Goura's team, Ivo Reck, outlined the team's perspective: "What city do you want? A city where car-centrism is the focus or a city where people are planning protagonists". Following the success of this forum, Claudio Oliver was invited to address city ministers before they voted on new laws regarding urban agriculture in December 2017 (IMAGE 49).



IMAGE 49 – CLAUDIO OLIVER ADVISES CURITIBA CITY HALL ON URBAN AGRICULTURE
SOURCE: CLAUDIO OLIVER, 2017

Similar to the theoretical battle that was waged by *Pargue Gomm*, between 2 different forms of urbanism, the last Project that this section will mention is the

¹⁸ Described in more detail below, see section 3.3.3.4

citizens struggle that is called *A Causa mais Bonita da Cidade*, which translates as “The most beautiful cause in the city”. This group is trying to defend a green zone close to the city centre, which until recently was a hospital and retirement home for old people within a large privately owned green area with a lot of old trees and the sources of urban streams. The neighbourhood where the park is located is named after the retirement home: *Bom Retiro*. As the poster currently pasted to the wall outside the derelict site now states (IMAGE 50): “How to destroy the history of a city. 1) Deactivate a hospital 2) Sell the land to real estate agents 3) Destroy the building with everything inside 4) Remove the tomb of the hospitals founder from its resting place 5) Build a shopping centre on top of all this” (A CAUSA MAIS BONITA DA CIDADE, 2018, Authors translation). For over a half year this group have met on Sundays outside the entrance to the grounds to carry out cultural events to forward their demands and build up a citizen’s movement to stop the shopping centre. Their dream is to save this green space and create a peoples park; *Parque Bom Retiro*.

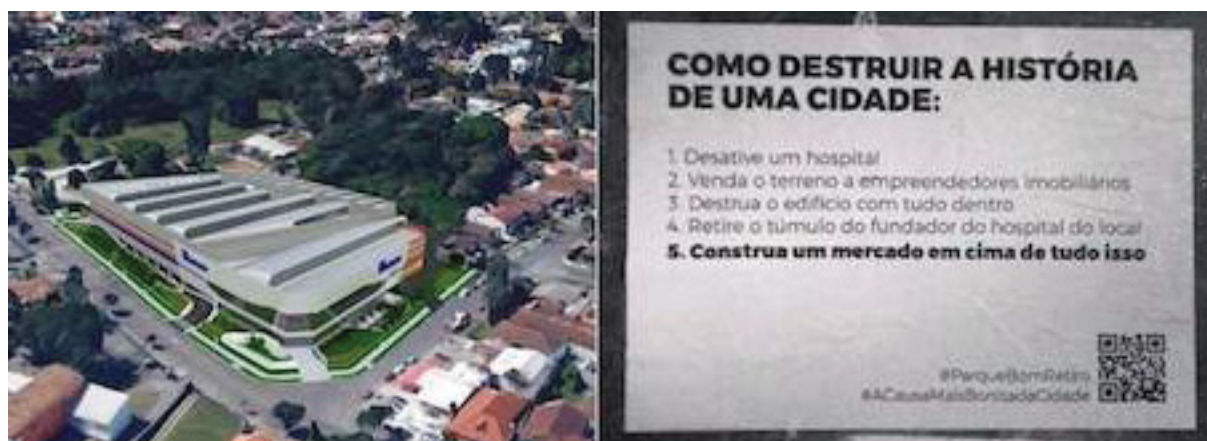


IMAGE 50 – PARQUE BOM RETIRO OR ANOTHER SHOPPING CENTRE
SOURCE: A CAUSA MAIS BONITA DA CIDADE, 2018

The challenge to create truly sustainable cities, or ecocities, is to facilitate wider public participation in creating a shared vision for the city. The essence of this is political organisation. What is clear in Curitiba, is that in a short space of time, SMs have gotten organised and have connected with more citizens. The following section explores more movements working in this area, not necessarily in gardens, but still with the same objectives of using citizen participation to create a sustainable city.

4.3.3 Connecting Communities: Urban Actions as Catalysts for Change

The following subsections address more recent actions by groups currently active in Curitiba, which cover more angles of this theme of Greening the City. The following projects are identified as possible catalysts for change, while they vary in scope, there is a common thread throughout: All projects seek to connect communities, build new relationships, understand complexities and try to co-create structures and mechanisms to facilitate sustainable change through CP. While not all examples examined were successful, failed projects also offer important insights.

4.3.3.1 Hack the city, new technologies, new types of movements

As explored earlier (section 2.2.4), new and changing technologies offer rapidly changing opportunities to make change, the emergence of the hacker is just one recent process that is disrupting old methods and constructing new means of building solutions to problems. In 2015 the Code for Curitiba group was formed, which is based around using new technologies, coding (computer language for building programmes), design and an accessible network open to anyone who wants to participate. They have hackdays twice a week and are a local chapter of the international Code for America Brigades, based out of the US. They have organised a series of Hackathons in the city, with different groups, including twice with the City Mayors office, NASA, Google and others. This is a marathon event, normally of 48 or 72 hours duration, where a few hundred people are presented with a challenge, or series of challenges, divide into teams, develop a theoretical solution, attempt to create a real world prototype and present it by a deadline. Some projects that grew out of these events have gone on to be successful businesses, some have led to creation of platforms to enable food distribution and some have led to apps for local communities to adopt water hydrants to ensure they are in good working conditions. While the group itself doesn't lead or gain from the success of these projects, they feel that they are creating an entrepreneurial environment which offers both solutions to pressing societal problems as well as opportunities for bright young people to focus their skills, creativity and energy to create work in doing what they love most. While their community is diverse, it is most connected with business and Startups.

A great success of this new environment, is the coming together of a huge range of different worlds: academia, NGOs, local government, community groups, focus groups (education, health, social, food), business, design, and creative youth cultures. The rapid cross fertilization of ideas and understanding between different groups and social classes about issues from cultural values, technical issues, problem solving techniques is quite incredible. In 2 years the group has grown massively and inspired similar projects throughout Parana state and other regions.

In April 29th & 30th 2017 the NASA Space Apps challenge happened, which then was seen as “The World's Largest Hackathon” (NASA, 2017). This was a singular global event happening over 48 hours in cities around the world, responding to the call out: “Coders, scientists, designers, storytellers, makers, builders, technologists, and everyone enthusiastic about space come together to address challenges we face on Earth and in space!” (NASA, 2017). People participated from 69 countries, 187 locations, ~25,000 participants, with a reach of about 40 million people with the #SpaceApps hashtag¹⁹. The challenges were divided into 5 categories, each with between 4 and 8 specific challenges within. Each challenge was linked to relevant Sustainable Development Goals (SDGs), created by the UN

Which aim to build a better future for all people by achieving sustainable development in three dimensions – economic, social, and environmental – in the spirit of strengthened global solidarity. Goal 11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries. (NASA, 2017)

In Curitiba, the event happened in the new centre for Startups Jupiter. 258 people participated, broken up into 22 teams. The winning project Juno Radio was for a radio alert system based on NASA data to advise communities when forest fires started, combining low tek tools and old schools human networks with hi tek data to assist communities deal with a problem that destroys communities. Members of the winning team were part of another project We Are All Smart, which grew from the Code environment in previous months and works with kids in periphery regions. Amongst the team were a 14 and 15 year old, whose dreams came through when they won the top prize in Curitiba and got to go to NASA to develop the next stage.

¹⁹ Hashtag data is for the timeframe between March 31–April 30 on Twitter and Instagram.

4.3.3.2 Smart Cities

The iCities group are exploring means to transform the city through solutions based around hi tech, business, new economies and major corporate financial investment from both national and international companies. While their objective is also a Sustainable City, their means of achieving that objective is somewhat at odds to much of the rest of groups, actions and theory already explored here. They see change coming through increased economic development, led by hi tek innovation. Similar thinking to the recent Ecocity failures in Asia, which as Sze implied earlier (Page 38): seeks sustainable capitalist discourse to environmental problems. Problems that, as Klein, Bookchin and others outlined, stem from Capitalism. Some see their solutions as “Tehno-fantasy” or “Green-Tech Stability”, as outlined on Coke’s future scenarios chart (Page 62). But they do offer pathways for change and most recent happenings show that perhaps newer social solutions are opening up in this environment, hence worthy of inclusion in this section. They define themselves:

iCities is a closed corporation with the goal of providing projects and solutions for smart cities. The conceptual DNA of iCities understands a smart city as that which connects six axes: Impact Entrepreneurship (Startups), Creative Economy, Sustainability, Clean Energy, Technology and Communication. (ICITIES, 2018, Authors translation)

iCities are based out of the business centre near the Botanic Gardens; IBQP, the Brazilian Institute of Quality and Productivity, which houses different business groups and acts as an accelerator for new Startup companies. Code for Curitiba originally grew in this environment and IBQP facilitated some of the first Hackathons in the city as well running courses, talks and events. iCities ran a series of conferences in Curitiba exploring Smart Cities and core members participated regularly in the Barcelona Smart City forums. Seen as a great opportunity for the city, they managed to get the 2018 Smart City Expo World Congress (SCEWC) to happen in Curitiba. This attracted major international speakers for the 2 day forum in Park Barigui and it had an expo area to showcase latest hi tek developments.

The problem with the Smart Cities world in Curitiba is that it appears closed to normal citizens. It seems to revolve around expensive conferences that explore hi tech solutions, while little focus is given to social issues and actual processes that citizens can connect into to improve their local communities. But, things can change.

4.3.3.3 Social Enterprises building new connections

The world of Startups and the many new forms of Economies (circular, creative, solidarity, shared) contains many different types of new groups, in terms of group structure, objectives, focal area and the what type of communities they try to work with, both in terms of social structure and physical areas where actions happen. Many seem to compete with each other for limited resources, others seem nearly identical in terms of solution strategies, while more seem to develop nice projects in the safer areas of the city that appear financially accessible to only wealthier classes.

A trend that emerged in recent years is for new groups to identify themselves as social businesses or social enterprises, trying to develop new processes to work with physical areas in the city where social problems exist and proposing different means to try to improve things. Cheer For Peace, now called Peacelabs, developed projects with foreigners living in Curitiba and Brazilians who had lived outside and were inspired by business models and charity groups common in the US and Canada. They facilitated projects in the Villa Torres favela working with a local NGO there, which called on Curitiba citizens to volunteer their time, skills or resources. They then created a business model to develop similar social solutions with money given by Brazilian businesses through Corporate Responsibility (CR) donations. Some say that this process takes away from the states role to resolve societal problems, others point out that the state is currently unable to resolve these issues.

Diego Baptista set up *Sociedade Global* (Global Society - SG) in 2011 to create new pathways for development. They have facilitated many connections between different active groups in the city (universities, companies, governments, civil society, social businesses, accelerators and incubators) by offering “Transformative learning environments for individuals and organizations seeking social impact” (SOCIEDADE GLOBAL, 2018). Their work is driven by Diego’s personal drive and ability to facilitate, using new techniques that allow for maximum input from individuals, working on many levels. Similar to techniques used by PC, TT and GAIA, SGs methodology can give both greater feelings of connectedness to the project on the personal level, it feels stickier (Using Albert’s phrase), as well as a way to generate deeper data and critical insights at the macro level, regardless of group. For 2016-2017 SG shared a workspace near the centre with IN and Design Ao Vivo (Live Design), which they called Transition House, partly inspired by TT thinking.

SGs initiative JPD (Young professionals for development) carried out their event "Democratic Dialogues: Building Opportunities for Popular Participation in the Master Plan of Curitiba" in July 2014. This was to facilitate a public discussion (IMAGE 51) relating to the City Master Plan being revised that year. Using Human Centred Design (HCD) methodology, their objective was "To better understand the current tools of democratic participation" (SOCIEDADE GLOBAL, 2018). Their event united more than 50 actors from different sectors of society, including representatives from different organizations in Civil Society, IPPUCs coordinator Miguel Roguski and the President of IBQP, Rodrigo Rocha Loures. They developed a prototype process for urban solutions based on the diverse contributions of the event and published their recommendations for greater public participation in the co-creation of the city.



IMAGE 51 – BUILDING OPPORTUNITIES FOR POPULAR PARTICIPATION IN THE MASTER PLAN OF CURITIBA
SOURCE: SOCIEDADE GLOBAL, 2014).

In 2016 SG launched *Todos Fazem Parte* (All Play a Part - TFP), to Articulate, Mobilize & Transform the city. SGs work is built on their belief “in a more integrated and collaborative Curitiba, based on the continuous actions of articulation of people and actors in the construction of collective solutions to the challenges of the city”.

TFP was an 8 month process structured in three main phases: 1) Collaborative diagnosis with meetings, dialogues, surveys, immersions and collective analyses; 2) Portfolio of integrated solutions such as crowdsourcing, open innovation and laboratories of social innovation; 3) Ecosystem integration with intersectoral agreements, mobilization of society, acceleration of solutions and coordination of actors. The initial stage involved activists engaging in street actions in June to “actively listen” to people in the public realm. This was followed by a series of 13 “Integrated Dialogues” with 160 participants from which the following 10 areas were agreed as themes of further investigation: 1. Technology, Information and Communication; 2. Urban planning, urban mobility, housing 3. Social Engagement & Citizen Participation 4. Homeless situation 5. New Economies and new paradigms of Business culture 5. Health, Culture of Peace & Spirituality 6. Education and New Forms 7. Feminism 8. New Economies and new paradigms of Business culture 9. Refugees 10. Environment, Food & Conscious Consumption. The next stage *Rumos para Curitiba* (New Directions for Curitiba) happened in August with each of the 10 themes analysed in regard to SDGs and further proposals made in each category.

These moments helped build up diverse networks of social connections and a greatly diversified understanding of the interconnected challenges of the city. In November SG facilitated a public workshop in IPPUC to further explore #2: **Urban planning, urban mobility, housing**. Perhaps this showed that city institutions were becoming more open to higher levels of public participation in the creation of the city.

In late 2017 SG and 15 more social initiatives formed *Coletivos em Movimento* (Collectives in Motion), a network to assist some of the poorest communities in the city, such as Parolin and Vila Torres, by developing projects with the communities:

We believe that in order to achieve a more just and equal society, we must provide opportunities and access to rights and quality of life for all. The work of Collective in Motion is based on the identification of the demands of each community and support for the elaboration and implementation of social projects. We act to mobilize and connect a network of talents that can make them viable. We seek to provide support and capacity for the community to become the multipliers and managers of their projects. (COLETIVOS EM MOVIMENTO, 2018, Authors Translation)

After the Parolin community selected 11 projects they wanted to develop on 21st December, the first major *mutirão* (IMAGES 52-55) began on February 25, with community gardens, health clinics, PC & art workshops; communities are connecting.



IMAGE 52 – ELABORATION OF CURRICULUMS WORKSHOP
SOURCE: COLETIVOS EM MOVIMENTO, 2018



IMAGE 53 – SUSTAINABLE DEVELOPMENT AND COMMUNITY INNOVATION
SOURCE: COLETIVOS EM MOVIMENTO, 2018



IMAGE 54 – PERMACULTURE GARDEN PAROLIN
SOURCE: COLETIVOS EM MOVIMENTO, 2018



IMAGE 55 – DENTAL WORKSHOP
SOURCE: COLETIVOS EM MOVIMENTO, 2018

4.3.3.4 FUSA. Attempts to recreate the cities old Socioambiental Front

FUSA (Frente Unificada Socioambiental Curitiba) stands for “United Social Environmental Front” and was the name given to an interesting chapter in recent history for ecological SMs in Curitiba. Existing for a half year, from June till December 2016, it outlined very well that while some individual projects seem to be working well in the city and wider region, big challenges exist for different groups to come together, work together and build collective movements to effect wider change. FUSA’s objectives were twofold; an attempt to reopen the process used in the city in the 1980s and to celebrate one of the greatest victories of that earlier SM, the upcoming 30 year anniversary of the victory of the *Tombamento do Serra do Mar*, when environmental activists secured that the green areas in the hills outside the city remain a protected natural area. The first meeting was well attended by about 30 people on the 1st of June in the *Escritorio Verde* (Green Office - EV), one of the cities most advanced eco buildings, which is part of the public UTFPR university, and which facilitates SM gatherings and related events. EV’s project leader, Eloy Casagrande was a leading force that facilitated FUSAs re-emergence, he outlined:

30 brave people met in the Tereza Urban Room of the UTFPR Green Office to discuss strategies for the reorganization of the environmental movement in Paraná. Activists, teachers, students, professionals, representatives of the indigenous cause, health, NGOs, shared the same anguish: the environment in Brazil continues to be mistreated at federal, state and municipal level! It became clear that despite the increase in environmental awareness, there is a feeling that we are losing some battles and we need to react. We have plenty of reason to reorganize ourselves in the face of the great threats that linger over what remains of nature in Brazil. Only organized civil society can cope with this problem, which belongs to everyone. Together we are stronger! (CASAGRANDE, 2016, Authors Translation)

Despite the interest and a series of meetings rotated between different community spaces, FUSA had many problems. Firstly, strong ideological differences between a few environmentalists who called for human free enclaves and a wider group that argued this was unfair to indigenous communities. Later issues of lack of a coherent sense of what was FUSA, what were its objectives and how decisions were made, led to breakdown of communications and many people leaving the process. The 30-year remembrance action happened in Barigui Park, but with less than 20 people participating. FUSA soon dissolved itself. From it, some participants created a new single-issue movement MUSA to try to clean the cities contaminated rivers.

4.3.3.5 Ecocity Curitiba Festival

The Curitiba Ecocity festival lasted 5 days, from Wednesday the 12th of July till Sunday the 16th, 2017. It was organized as a parallel event to the World Ecocity Summit, organized by Ecocity Builders, in Melbourne, Australia. The action had both global and local aspects, simultaneously. Globally, It was an experimental, positive provocation as to how Global Forums can become multinodal with greatly increased levels of participation, leading to greater and quicker urban transformation with the construction of an expanded global Ecocity network. Inspired by Hackathons and dynamics explored earlier (section 2.2.4), organisers felt that technology could be used to a far greater degree, facilitating livestreams, live radio transmissions and multi nodal discussions and joint actions about different issues.

Locally, the objective was to explore the idea of how to Fix The City, an open invitation to actors in the city to come together, share ideas, identify problems and possible solutions together, with secondary objectives being:

To examine and support local solutions, develop tools to identify who is currently doing what and where in the city, improve interconnection between actors, facilitate greater public participation, investigate the physical city more deeply, push the limits of the use of technology and dialogue, build and share visions of what sustainable futures might look like, explore how new jobs in an ecological economy can be created, use free social community events in public spaces as tools for change, including picnics. In short, to change the culture surrounding the idea of what an Ecocity is, in Curitiba, through theory and practice in an open, attractive, inclusive, accessible and social way. (ECOCITY CURITIBA, 2017)

An important aspect was in attempting to create a truly diverse meeting of people and ideas, but also in the physical locations beyond the comfort of the safer city centre. The festival of 5 days included 14 events, 15 separate locations, 39 groups helping organize or participate and 160 participants. Daily Themes included: 1) Technology & Economy 2) Nature & Food 3) Community & Change 4) Culture & Public Spaces 5) Water & Mobility. The issues that people identified as most critical for Curitiba were: 1) Waste 2) Security 3) Community 4) Green areas 5) Food 6) Energy 7) Mobility 8) Citizenship 9) Consumption 10) Water 11) Economy, including jobs 12) Technology 13) Public spaces. A bikeride went from Curitiba to Fazendinha in the periphery. During the “Walk for a 100% edible city”, a native fruit tree was planted in the Cristo Rei community garden to celebrate their previous nights victory.

4.3.3.6 An emerging Municipalist Network for Curitiba

A major milestone for the new SMs that emerged since 2007 was the election of Goura to public office in 2016, which marks the start of the occupation of the cities municipal institutions. While Goura did not run on a purely Municipalist manifesto, running as a candidate for the traditional PDT (Partido Democrático Trabalhista) party, he used the opportunity in the run up to the elections to create a horizontal open platform which can be seen as something very similar to both Municipalist structures and process, as outlined earlier (Page 63). The Platform is still active.

Goura Nataraj changed his name from Jorge Brand when he went to India on a spiritual retreat some years back. He is Master of philosophy, yoga teacher and a citizen who fights for causes such as reoccupation of the public space, preservation of the environment and humanized childbirth. He is an activist who worked to construct the Cyclist Pocket Square and Cicloiguaçu Association, where he worked with the public policy to make Curitiba a bike-friendly city. He ran for the 2014 federal deputy elections and won 13,000 votes after running a very creative collaborative campaign with much of the SMs and artistic movements of the city. In 2016 he was elected a city councillor for Curitiba. He is the son of a poet Jaques and a psychiatrist Margarida. He is married to Elenice and has 2 daughters, Sofia and Tulasi.

Having been inspired by anarchism and participating in leaderless SMs, Goura sees politics in a different way to the traditional party political system. He sees his role as a conduit between the demands and proposals from civil society and the mechanisms of the political system. The collaborative campaign that he and the various SMs created before the elections, involved a 2 month period using a house that friends donated to the campaign as a base for daily discussions with invited guests coming to share insights about various issues with Goura and the public. This period was coupled by social events, vegetarian meals, concerts, films, music and poetry nights. The aim of this period was to co-create a political mandate in the most open transparent manner possible. The chief areas of focus were: 1) Mobility 2) Environment 3) Human Rights 4) Natural Childbirth 5) Art and Culture 6) Sport 7) Metropolitan issues 8) Accessibility 9) Occupation of Public Spaces. Working Groups (GTs) formed around each issue and dedicated discussions over the period led to a series of political objectives being created for each. As much as was possible, content was uploaded online too, for public participation from a distance.

Since the election, Goura has an office in the *Câmara*, the City council, and has a full time team of 9 fellow activists. The GTs are still active with many groups meeting with Goura to advance the various projects. Goura has invited people to speak inside the main chamber about important issues and has used the *Câmara* infrastructure to facilitate public discussions to further build citizen movements. Relating to Sustainable Cities, the main public audiences have been about urban mobility, Urban agriculture and, on the 23rd of March 2017, international water day, the revitalisation of the river which the city originated beside, the Belem River. (IMAGE 56) Goura is vice president of the Environmental commission of the *Câmara*.



IMAGE 56 – PUBLIC AUDIENCE FOR THE REVITALISATION OF THE RIVER BELEM
SOURCE: CÂMARA MUNICIPAL DE CURITIBA, 2017

Goura still carries out JL and other actions with SMs he is part of. As part of the River Belem project Goura has co-organised 2 bikerides. He also has regular monthly morning meetings with cyclists on the steps of the *Câmara* and acted as a spokesman when protesters stormed and took over the *Câmara*. To mark the end of his 1st semester, Goura held a public audience in a local circus theatre to share results and seek dialogue. Nobody knows where this will all lead, but It is clear that a Municipalist like structure now exists which could easily be built upon by SMs into something far more radical. Curitiba might yet become Brazil's first "Rebel City".

4.3.4 Conclusions

Based on different levels of involvement with groups discussed above who have been involved in creating urban actions to create a more sustainable Curitiba, while taking into account the 4 criteria outlined earlier (TABLE 13), the author shares finding here about; Responses from Curitiba. The actions have happened in the city of Curitiba, which is a territory not limited to the municipality of Curitiba, as outlined in the map of recorded actions of various groups (IMAGE 57). Conclusions are below:

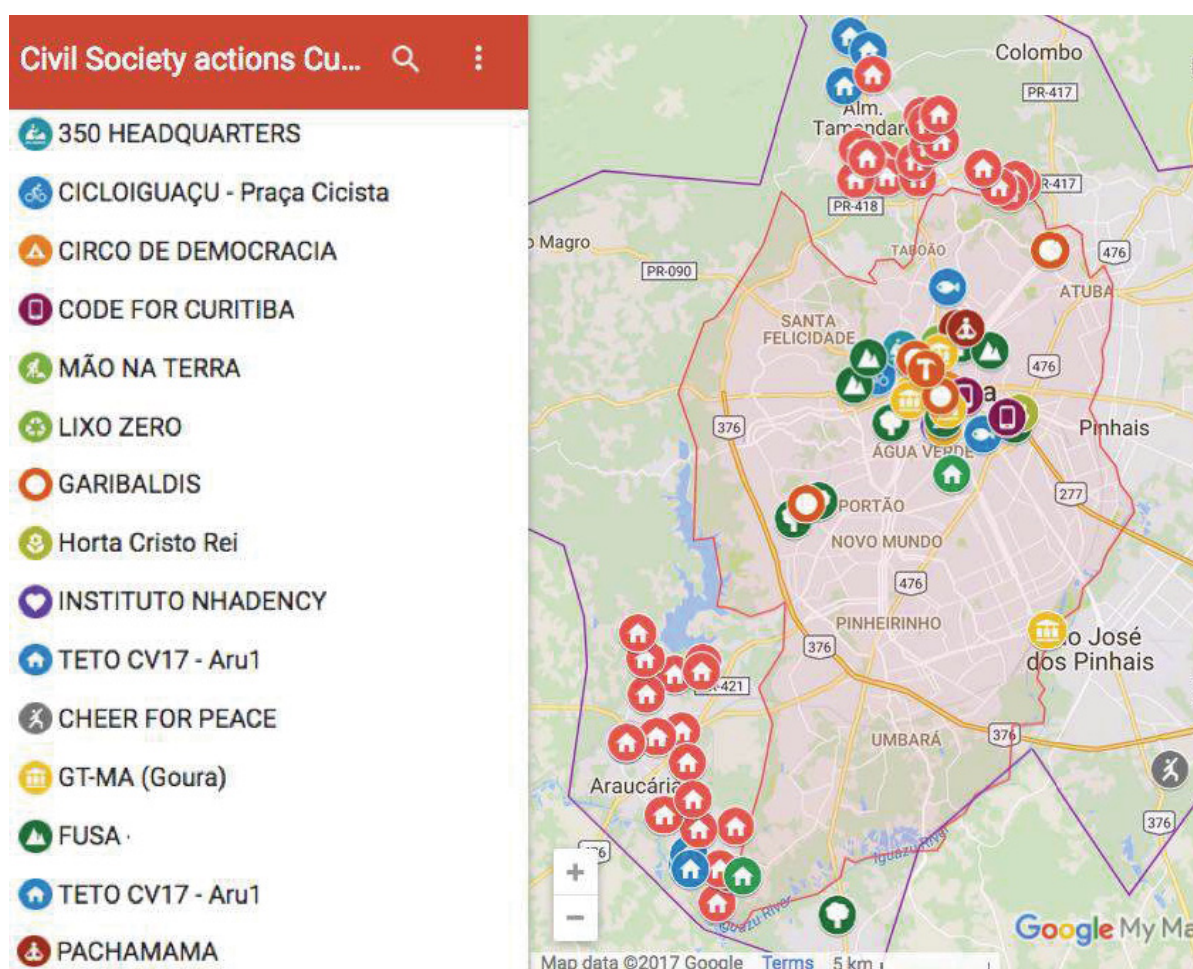


IMAGE 57 – MAP OF CIVIL SOCIETY ACTIONS IN CURITIBA 2016-2018
SOURCE: ECOCITY CURITIBA, (2017).

The different communities working to create a sustainable city through citizen participation is large and diverse, with different approaches to attempting to make change seeing different factors of success. Ultimately, the ability to implement urban change for a more sustainable city is a political matter. Therefore a challenge identified was the ability for movements and projects to build up a culture around

sustainable urban issues that includes a political component. Since new direct action focused movements in 2007, Curitiba has started to be transformed through SMs based on radical ecology, citizen participation, inclusivity and a vibrant cultural movement to effect political change in the urban landscape. With the growth of more community gardens and similar small-scale projects, new citizen networks are forming in the public realm, facilitating a much-needed face-to-face means of engagement that fosters trust. Some of the initially confrontational SMs recognized that more formal structures needed to be created to realize objectives of the diverse communities. A risk with this is to lose the groups flexibility and openness. Both the bicycle and urban ecology movements have advanced very much in recent years and the election of Goura in 2016 was truly a milestone for these SMs; from occupying the streets to occupying the cities municipal institutions. Since taking office, the various SMs that Goura is part of and still supports, now have access to the infrastructure of the city to further influence the public about sustainable urban issues. The co-creation of policy, through the open processes of the various GTs is typical of Municipalist strategies and this could develop further to make more change.

What has been striking and very positive in Curitiba has been the use of cultural and artistic groups and movements to further advance these ecological SMs, especially with the groups associated with ABM. Since the start, these groups have developed forms of resilience, because since the start they called on and survived only due to CP. Later the municipality supported them at times, but they still possess this DIY (Do It Yourself) attitude. The projects outlined in the Greening the city section (3.3.2) all share this aspect. Both their organizational structures and their physical spaces are open to anybody who wishes to engage. In most cases, it is also free to participate. This allows for all people to get involved, regardless of social or economic position. When these projects happen in the public realm, there are extra dimensions to the project. People can be attacked and projects can be destroyed or have things robbed. In Brazil, with its already high levels of violence increasing due to the economic crisis, this can be a determining factor for some people who feel that the risk of participating in a project is too high. Other projects and actions assessed, such as some of the Smart Cities and Social Enterprises, appeared to happen in safe, closed and more controlled environments. Another aspect of CP is that of the levels to which newer participants can get to in terms of quickly getting into the core group where decision making can happen. Here the defined structures of the

different groups can affect their success, where people come to some actions of a group, which they might enjoy, but despite desire to participate deeper, the group cant or wont allow such immersion. In some cases in Curitiba, it seems people consume eco events, as opposed to participate in the events, including often paying high prices to do a programme or workshop.

The interconnectivity between groups is important. In the gardening movements Parque Gomm can be seen as having acted as a catalyst, from which newer projects have been born. This ability to multiply is very powerful, the rhizomatic like appearance of new nodes depends on levels of openness too. Also with the movement expanding the geographic factors become more apparent. Whereas many people involved with Gomm did not live nearby, but came and supported for cultural and social reasons, the newer projects are being created by people who live next door to them. This gives added vibrancy to the project, leading to increased interconnectivity and development of community, as well as expansion of the project boundaries, for example the Cristo Rei street becoming a kids play zone and outdoor cinema, at times. An earlier negative point seemed to be lack of interconnectivity between many projects. FUSA demonstrated that despite a coming together of some of the strongest, or oldest SMs and environmental NGOs, there were too many differences between the actors to construct dynamics for change. This inability to work together in a united front, or for a specific demand, is a problem that can be resolved, but more work is needed. The work of SG has been very important in this regard, developing methodologies and bringing together many groups to truly diversify the conversations, which has led to important new insights about both problems and solutions. The Ecocity festival also addressed this problem and attempted to bring divergent groups together to not just share ideas, but also to try to co-create the process. Another factor that the Ecocity festival addressed was the location of actions: Were they happening in the established locations that are safe and central, and often only frequented by certain types of Curitiba citizens, or were there attempts to “Get out of the activist Ghetto” to connect with communities in their territories in periphery areas of the city. At time of writing the most recent actions in the city described were those in the Parolin community with the Coletivos em Movimento, which shows another important advance for SMs. Both due to the location, in a city centre favela, but also the structure, not just 1 NGO, but at least 15 diverse groups coming together with the community to create a process which is

driven and based in the community. This is very important in 2 ways: Firstly the action is not just an NGO which drops in for a day and leaves, they come to establish an ongoing relationship with the community. Secondly, for the groups participating, activists can be moved seeing the social realities of marginalised communities. If more of these interactions can happen it can be only a good thing and can wider help change strong cultural attitudes in Brazil.

Regarding the analysis of the group of 30 (TABLE 16), the 4 criteria for analysing each was explored earlier (TABLE 13). This is just a tool to get a sense of where the author feels each group stands, regarding the 4 criteria. The purpose was to assist in assessment, not in creating a ranking of who is best. Different groups have different focuses, so they will score differently. The results are the following:

TABLE 16 – GROUP ANALYSIS: LOCAL CASES: FURTHER ANALYSIS

GROUP	SOCIAL	ECONOMIC	ECOLOGICAL	WORLD VIEW	TOTAL / 40	RATING
Horta calcada cristo rei	10	9	10	8	37	1
Bicicletaria Cultural	8	10	9	9	36	2
TETO	10	9	8	8	35	3
Sociedade Global	9	9	8	8	34	4
Praça de bolso do ciclista	8	9	9	7	33	5
Cicloiguaçu	8	7	9	8	33	5
MST	9	8	9	7	33	5
WRI Brasil Cidades Sustentáveis	7	8	9	8	32	6
Parque Gomm	6	7	10	8	31	7
Curitiba Lixo Zero	8	6	9	8	31	7
Coletivo Mão na Terra	8	7	9	6	30	8
Instituto Nhandecy	6	8	9	7	30	8
Circo de Democracia	8	7	6	8	29	9
350 Brasil	7	7	8	6	28	10
OCEL	9	7	7	5	28	10
CASLA	8	6	7	6	27	11
Code For Curitiba	7	7	5	8	27	11
Dona Clara Occupation	9	6	4	8	27	11
Garibaldis & Sacis	8	6	6	7	27	11
Jardim das Amoras Brancas	6	6	9	6	27	11
Nacion Pachamama	6	7	8	6	27	11
Centro Cultural Humaita	9	6	5	6	26	12
PCS	3	6	8	6	25	13
Vagas Vivas	6	6	6	7	25	13
Laboratório de	8	5	5	7	25	13

Cultura Digital						
COURB	5	6	6	7	24	14
Peacelabs	8	6	5	5	24	14
Cidades Justas e Sustentáveis	5	7	7	5	24	14
Movimento Nossa Curitiba	2	3	7	6	18	15
Curitiba em Transição	3	3	5	5	16	16

SOURCE: ORGANIZED BY AUTHOR

From this analysis, we will now examine 3 of these groups in more detail.

4.4 CASE STUDIES: 3 GROUPS CURRENTLY ACTIVE IN CURITIBA

Three groups assessed in the last section, in the list of 25+, are examined here in more detail. They were selected because their urban actions are seen as most relevant to the areas already explored in this dissertation. They all meet the following criteria: 1) They are currently active in Curitiba RMC 2) Their work focuses on urban sustainability 3) They facilitate citizen participation 4) They have an international connection²⁰. The 3 groups are: 1. Cicloiguaçu 2. Instituto Nhandecy 3. TETO

This section (3.4) gives a detailed analysis about each group, including its history and objectives. Some of the key urban actions of the groups will be selected for analysis, photographic support will be offered to help give a fuller sense of context.

The following section (3.5) analyses data and response from a questionnaire issued to each group. It also contains a section based on insights learned by the author from time spent with each group while using the PAR approach.

The results will be shared using tables, maps, images, author's PAR reports from participation on actions and interviews with key actors.

²⁰ Groups that have some form of international connection or support, means: A) They can be currently receiving, or have received financial investment, resource support, or people assisting in local actions in Curitiba for a period. B) They are a local group of an international body. C) They facilitate programmes locally that are developed outside Brazil. D) Other, that they define, that meets authors and coordinators satisfaction.

4.4.1 Case Study 1: Cicloiguaçu

Cicloiguaçu is short for *A Associação de Ciclistas do Alto Iguaçu* (The cycling association of High Iguaçu - CI) (IMAGE 58). The Iguaçu River is what all Curitiba's rivers flow into, with the river springs starting just outside the city limits. This NGO was formally set up in 2011, by groups which had acted loosely as different social movements over previous years, they are active in Curitiba city and the wider metropolitan region of Curitiba RMC. Their mission is: "To create an interface for constructive dialogue about public policy, to consolidate the development of cycle mobility politics". (CICLOIGUAÇU, 2017, Authors translation). They have had 100s of members and many of their proposals have been implemented by the city council. They are engaged in work with communities in many parts of the city, including the periphery. The following are some of their important milestones (TABLE 17):



IMAGE 58 – CICLOIGUAÇU LOGO
SOURCE: CICLOIGUAÇU (2012).

TABLE 17 – CICLOIGUAÇU MILESTONES (2011-2017)

YEAR	MILESTONE
May 2011	Creation of Cicloiguaçu
Sep 2011*	ARTE BICI MOB - month long festival of bike culture (Started 2007)
2011*	Pedaladas / critical mass bike rides (Started 2005)
Feb 2014	3rd world bicycle forum
Mar 2014	Vaga Viva street action, Avenida Cândido de Abreu, Centro Cívico
July 2014	Brazil's first Via Calma, Rua 7 Setembro
Sep 2014	Praça do bolso ciclista (cyclists pocket square)
Oct 2014	Cicloiguaçu ex president runs unsuccessfully for State Elections
Feb 2015	Cicloiguaçu ex president invited to work with Municipal Transit body SETRAN
Mar 2015	Ciclorrota Portão/PUC
Sep 2015	Helped secure a MoU between Holland and Curitiba
Sep 2015	Centro Cívico Vaga Viva opened
Nov 2015	Área Calma launched
Nov 2015	Vaga Viva Rua Riachuelo opened
July 2016	Curitiba regulates Vaga Vivas as "Parklets"
Oct 2016	Cicloiguaçu ex president elected local city council
Mar 2017	Mercado Municipal Vaga Viva opened

SOURCE: DEVELOPED BY THE AUTHOR, CICLOIGUAÇU (2017). * DENOTES EVENTS THAT EXISTED BEFORE FORMING CICLOIGUAÇU, THEY NOW CO-ORGANIZE

Before officially forming, the bike activists existed as a SM involving many collective political actions to outline lack of rights or infrastructure for urban cyclists, with much creativity and sometimes illegal direct actions, such as the painting of a cycling lane on a street without municipal support in 2007 (described earlier, page 115). They formed in 2011, keeping their open structure to attempt to bring about the changes they wished to see in the wider city, for cyclists and related issues such as urban mobility, safe and humane cities, the right to the city, education, art and culture. They were creating a culture of active citizenship, open to all and for all.

The year 2014 saw them host the 3rd World Bicycle Forum (FMB3), which was attended by hundreds of people from Brazil, Latin America and other countries, including guest speakers and activists from Europe and the US, the focus of the conference went beyond just cycling issues to include full exploration about urban issues, under the title “The Balanced City”. The city mayor’s office supported the event by placing an artists big bike sculpture in front of city hall. This was replaced by a more robust, 3 metre sculpture (IMAGE 59) that demonstrated continued support for city bike movements by mayor Gustav Fruet, until the end of his term in 2016. CI’s work has led to some significant urban changes; first the crowd sourced act of turning a derelict street corner into a community designed and built public square, which led to further transformation of an important urban street. Then the creation of the cities first official *ciclofaixa* (bike lane) on the iconic September 7th Street, on which the BRT bus system ran. This was followed by the creation of the *Area Calma* (Calm area), an area of the city centre limited to maximum traffic speed limit of 40km. Since 2014 CI have participated in the creation of *Vaga Vivas* in the city, artistic actions to temporarily transform car parking spaces into social spaces, which has led to the construction of 3 permanent small public spaces with seating: Centro Civico (2015), Rua Riachuelo (2015), Municipal Market (2017). The ex president of CI Jorge Brand, (aka Goura) joined the Urban Mobility Coordination of the Municipal Traffic Office (SETRAN) in 2015 and in 2016, was elected to the city council (page 126), to highlight the causes of the group and take further steps to implement their proposals.

The first major victory for CI was in July 2014 with the creation of Brazil’s first *Via Calma* (Calm way). The council implemented their proposal of a bike lane alongside the iconic BRT bus system, on the September 7th Street. The *Via Calma* is a 6,3 km designated bicycle only route that stretches from Rua Mariano Torres to Praça do Japão, alongside cars limited to a speed of 30 km/h (IMAGE 61-2).



IMAGE 59 – GIANT BICYCLE OUTSIDE MAYORS OFFICE
SOURCE: ELAINE CAÚS, (2015).

In 2015 CI's 2nd proposed traffic calmed bikeway was implemented, the *Ciclorrota* (Bikeway) between PUC city university and the dense urban neighbourhood of Portão. The 6,2 km shared space has blue and white bike circle symbols painted on the crossing points of more dangerous streets (IMAGES 60 & 61) was developed by the city council with the assistance of IPPUC (city planning office).

Mais Bici (More bikes) was set up in 2015 as part of the city government offices, through which Cicloiguaçu activists have had greater ability to develop public policy for citizens, especially in the overlooked periphery or poorer parts of the city. They have open monthly meetings that the public can participate in. The council has

implemented many of CI's proposals for clear street signage for bicycles and the issuing of free maps to the citizens (IMAGE 61).

The *Área Calma* (Calm Area – IMAGE 62) came into effect in November 2015 with a maximum speed limit of 40 km/h within the central zone and 22 speed cameras at 12 junctions to monitor car speeds. The argument is that if accidents happen, the risk of death is greatly reduced by such speed reduction. The project was implemented by while Fruet was still mayor. The project is controversial and hated by many drivers, with the elections of a new mayor, Greca, in 2015, the council is talking about scrapping the scheme, CI continue to fight to maintain the project.

Through their successful projects they were able to invite foreign participants to participate in the 3rd World Bicycle Forum (FMB), after which CI members were invited to other countries. In September 2015 CI along with other Brazilian and Dutch parties came together under a Memorandum of Understanding (MoU) to promote sustainable mobility and urban development, especially an increased use of bicycles as a regular means of transit. Under this Memorandum, Dutch students from Twente University spent a semester in 2017 in Curitiba to carry out research on mobility.

Before the creation of the NGO, bike activists identified the lack of a safe place to store bikes in the city centre as a major problem, which stopped many people using bikes as a transport system for working in the centre. Responding to this, 2 activists set up a social business in 2011 in a run down underground area of a building with a ramp down to it, called the *Bicicletaria Cultural* (Cultural bikeshop - BC). It was a safe place to store bikes and a cultural space to allow groups to hold meetings with a wider open area designated as a space for gigs, theatre and events, it also had a mechanic space for fixing bikes and running workshops. CI use the BC as their regular weekly meeting place, and often host various events there too.

While the core working groups of CI have influenced urban changes in the city, it is important to outline the huge role CP still plays in their organization. Since before being an active NGO, most of their core group were all involved with different SMs. These actors continue to work with their groups and seek to change the city through the cultural involvement of the wider society. CI help create actions described earlier (Pages 114-116), as well as newer ones such as *Bicicleta fantasma* (Ghost bike) cycles, which happen to commemorate when cyclist die on the roads. This involves painting an old bike white and a group of cyclists cycling to the point of the accident to fix the bike onto a nearby tree or building as a commemoration.

CICLORROTA PORTÃO/PUC



IMAGE 60 – CICLORROTA PORTÃO / PUC
SOURCE: MAIS BICI, MUNICIPALITY OFFICES, (2015).



IMAGE 61 – CYCLING INFRASTRUCTURE: SIGNAGE, MAPS
SOURCE: MAIS BICI, MUNICIPALITY OFFICES, (2017).

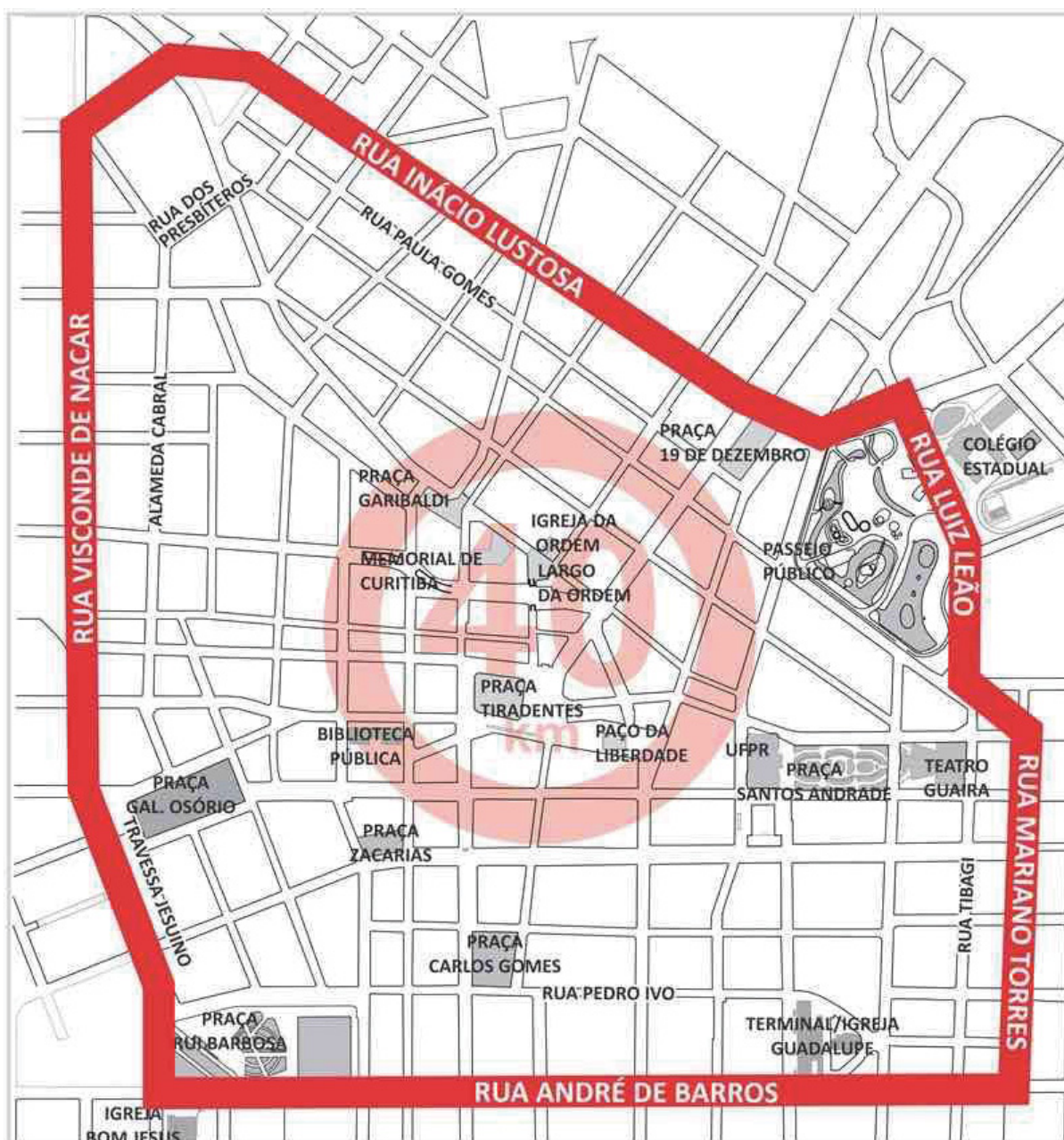


IMAGE 62 – ÁREA CALMA
SOURCE: MUNICIPALITY OFFICES, (2015).

CI have had many members approach them with different proposals which have led to them reaching further into the more peripheral regions of the city as well as exploring new ideas or testing new techniques. Many academics approach them to analyse data in the city with them, which further helps in their role of trying to influence the politicians at election time. In 2017 they engaged in a project with schools in some periphery regions through the SESI (Industrial Social Service) educational programme; *Projeto Bicicleta nas Escolas* (Bicycles in Schools Project). With this, CI activists held talks and organised events with 1300 children in

Boqueirão and CIC (The Industrial city) neighbourhoods. For the kids that were interested in progressing to the next stage, there was the opportunity to adopt a bike to use as transport to and from their homes. As well as their Curitiba city centre group, they have 2 more in neighbouring municipalities; 1 in São José dos Pinhais and the other in Pinhais. Together, part of the greater metropolitan city. Being flexible and open, when people approach CI, seeking their collaboration on a Project or to assist in spreading word to their network about an event, they respond relatively easily. This is typical characteristics of groups where many people are part of SMs. Also, by the very nature of being a cyclist in any big city, people know the risks. Tragically despite the creation of more bikeways in the city, still many people die on the streets. Because of this, cyclists have a natural affinity with each other, even when they don't know each other personally there is a bond, sharing same risks.

While CI can not claim full responsibility for the implementation of built projects in the city in recent years, they can certainly claim to be part of the dynamic that pushed for these urban transformations. In essence their work is political and they tackle their challenge from both the inside and outside. Now having their ex president holding office and facilitating a direct line for proposals to be explored and possible voted on by the city council, gives them even greater opportunities to make the city. But at election time CI also engage in lobbying, inviting would be candidates to discuss issues through public forums. CI encourage all bike users to be active citizens, to demand that the city implements change. To fully understand CI, We will finish by focusing on 3 specific actions that have led to changes in Curitiba's urban fabric; 1) World Bicycle Forum 2) The Cyclists Square 3) Vaga Vivas.

The first and second World Bicycle Forums happened in Porto Alegre, growing from the WSFs. From the 13th till the 16th of February 2014 the 3rd edition happened in Curitiba, fully organized by Cicloiguaçu and a wide network of volunteers that included support from the mayors office under Gustav Fruet. It was fully crowd funded, so that all events were free for the public, with nearly 80 events happening in more than 20 locations over a 4 day period, around the theme of "The Balanced City" (IMAGE 27). International activists travelled to talk and participate, including Lars Gemzøe from Jan Gehl's Denmark office to talk about their public transformation projects in New York, Chris Carlsson, who set up the critical mass bikerides in San Francisco. There were 1359 online inscriptions and 243 in person, with many people travelling from many countries in Latin America. The 2015 forum happened in

Medellin, Colombia. During the forum many incredible things happened including bike rides, film nights, art exhibitions, talks, art and theatre events, food and drinks events in bars and cafes that supported the event. The artistic team that produced the associated art and design work were fantastic and very professional, the Blue bear in the shape of Brazil on the little bike precariously cycling on a little line over the dangers below was both funny and realistic at the same time²¹. Urbanistically, one of the most lasting actions was a series of murals painted around the city by various artists, including San Francisco's Mona Caron, who painted the 4 story giant weed mural behind the wall where the Cyclists Square was later built (IMAGE 63).

The ***Praça de bolso do ciclista*** (Cyclists Pocket Square) (IMAGES 63-68) happened in the city in 2014, which radically transformed a tiny corner of an old street in the old city centre of Curitiba. A space less than 40 square meters, which had been derelict and boarded up for 20 years, on a critical corner of a street that had been a dangerous, nearly no go area, used by drug addicts, went through a transformation led by the public, with Cicloiguaçu acting as project managers. They had lobbied the council for years as to who owned the site and demanded change, which resulted in the council declaring a public square was to be built with Cicloiguaçu acting as project managers. The council had limited funds, so an open public process saw architects within Ciclolguaçu designing the square collaboratively and it being built over a series of weekends for 4 months by the public through the Brazilian system of Mutirão, self organized collective work events. The council closed traffic on the street during these periods. #RecrieSuaCidade (Recreate Your City) and #CidadeParaPessoas (City For People) were the hashtags used for online media for the calls made by Cicloiguaçu. Many artists supported the process, doing artwork on the new walls, creating gardens, building a bench using permaculture methods, doing a group mosaic project for the bench (Gaudi meets playschool), street fairs, games area on the street, art workshops, music and theatre in a street, painting a white patch on the wall for night time cinema. Mayor Fruet officially opened the Cyclists Square before a huge bike ride on International Car Free Day, September 22nd 2014. These months were an explosion of creativity, bottom up organizing and collective celebration of making urbanism. By the people of the city, for the people of the city. It changed the square, which changed the street. It could yet change the city.

²¹ The online retrospective of FMB3 is online here: <https://issuu.com/tiepassos/docs/catalogo/2>



IMAGE 63 – PUBLIC COMMUNITY DESIGN AND BUILD NEW SQUARE
SOURCE: PRAÇA DE BOLSO DO CICLISTA, (2014).

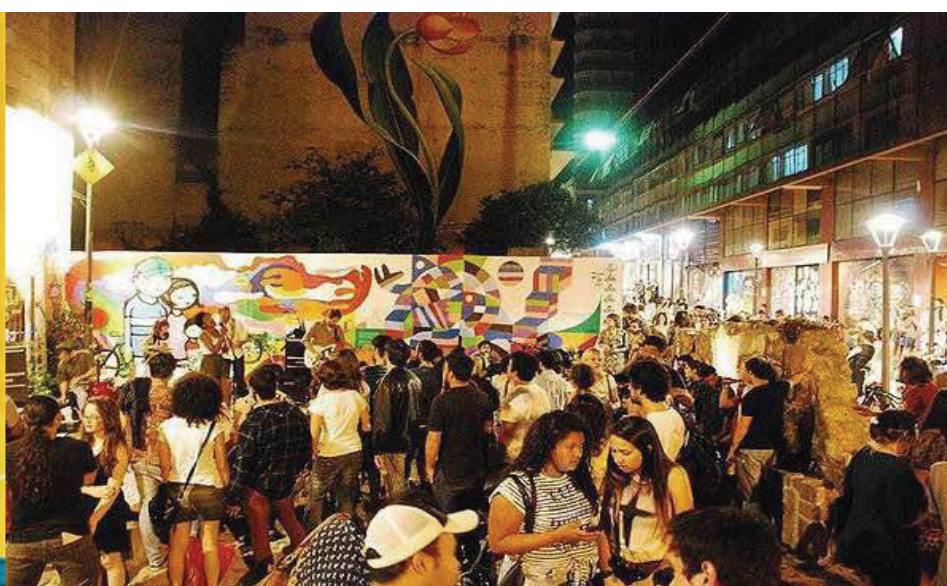


IMAGE 64 – 3RD WORLD BICYCLE FORUM POSTER & STREET PARTY
SOURCE: CICLOIGUAÇU, (2015) & PRAÇA DE BOLSO DO CICLISTA, (2015).



IMAGE 65 – #RECRIESUACIDADE STREETART
SOURCE: PIACWB (2014), VIA CICLOIGUAÇU

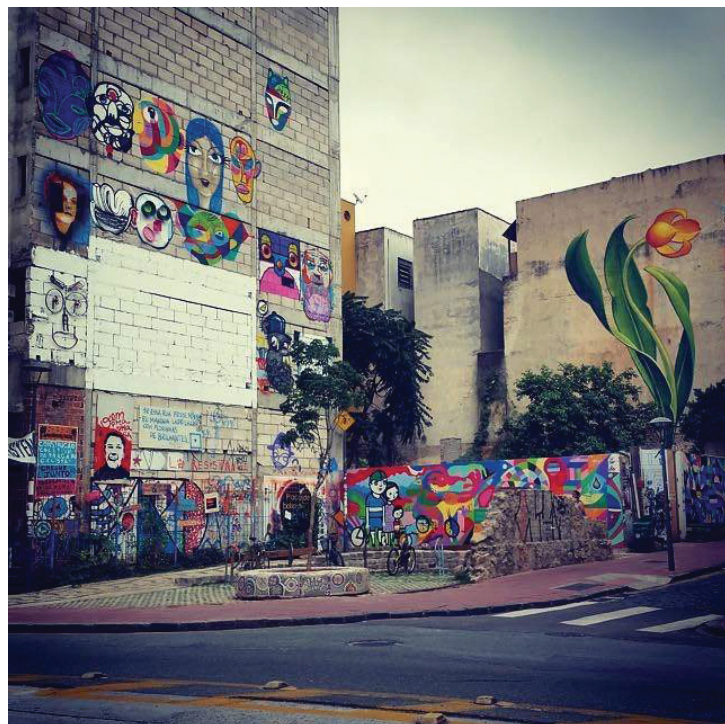


IMAGE 66 – SQUARE, STREET ART & CINEMA WALL
SOURCE: MAURI_MADMAN (2014), VIA CICLOIGUAÇU



IMAGE 67 – MOSAIC PROJECT FOR ECOBUILD BENCH
SOURCE: GOURA_NATARAJ (2014), VIA CICLOIGUAÇU

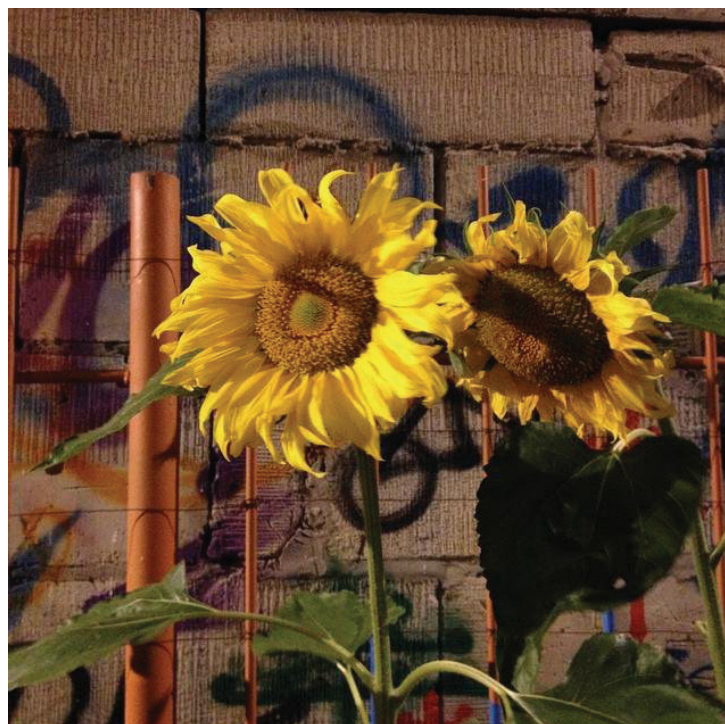


IMAGE 68 – GREENERY AND FOOD IN THE SQUARE
SOURCE: GOURA_NATARAJ (2014), VIA CICLOIGUAÇU

The *Vagas Vivas* (Free Carpark spaces - VVs) were inspired by the Park.ing movement, creative actions whereby parking spaces are occupied and transformed into small social spaces (IMAGE 69), highlighting the inequality given to cars over

pedestrians in cities, a call for a more human scale city. The *Avenida Vicente Machado* street festival happened yearly. In 2015 the *Festival Vaga Viva* happened here, where more than 20 separate spaces were turned into social spaces for a weekend. Anybody could participate in these projects. Cicloiguaçu proposed the creation of fixed spaces to the council and 3 have been constructed, including site of the street action in March 2014 in Centro Centre (IMAGE 70). In July 2016 the city regulated for transformation of parking spaces into “Parklets”, thanks to VV actions.



IMAGE 69 – VAGA VIVA – PUBLIC SPACE ACTION
SOURCE: GAZETA DO POVO, (2014).



IMAGE 70 – PERMANENT VAGA VIVA AT LOCATION OF 2014 ACTION
SOURCE: CICLOIGUAÇU, (2015).

CI grew from a passionate collective desire for urban change in Curitiba. From creative confrontation to intelligent political mobilization, change is happening.

4.4.2 Case Study 2: Instituto Nhandecy

Instituto Nhandecy (IN) was formed by a group of like-minded people who did the GAIA education course (GEDS, page 42) in Curitiba in 2011. Core members point to the training course as a real catalyst event in their lives, giving them courage to make changes in their lives and work, which resulted in the creation of IN as an NGO, a physical space and a community intent on bringing wider change in the world. The groups name derives from spiritual ideas in the Tupi Guarani language of the indigenous peoples of Parana: “Nhandecy is the “Mother Earth”, which spawned the twins of civilizations: *Nhanderiquei*, the force of the Sun, and *Tiviry*, the force of the Moon” (INSTITUTO NHADECY, 2017, Authors translation) and they work toward the collective *Bem Vivir* (Living Well) of all. They founded in 2011 and rented a small house near the city centre as a social space with a small back yard for plants. In 2016 they moved to a bigger location further from the centre with a garden and yard for events, they share this space with 2 other groups, *Sociedade Global* (Global Society) and *Design ao Vivo*, (Live Design) and the house is informally called the *Casa da Transição* (Transition House). They facilitate various training programmes (TABLE 18) and their chief role is acting as the official group offering GAIA education courses in Parana (GAIA-PR) they had courses in 2012, 2014, 2016 (IMAGE 71) and are preparing for 2018. The courses and programmes IN offer, regularly use their space. Some of them have grown from the GAIA education course.

TABLE 18 – INSTITUTO NHADECY PROGRAMMES

COURSE	DESCRIPTION
Gaia Education	Societal change based around 4 pillars of Sustainability.
Dragon Dreaming	Integrated system and complete method for the realization of creative, collaborative and sustainable projects, to facilitate the “Great turning point”
Non-Violent Communication (NVC)	Based on principles such as peace, love, autonomy, authenticity & freedom. Focuses attention at the heart of the meaning behind actions and words, facilitating the rediscovery of cooperation and personal empowerment.
Food Safety	“Seed is the source of life and the first link in the food chain.” Who controls the seeds, controls lives, food & freedom. In seed and soil are the answers to each of the crises humans face.
Solidarity Economic Circuit	Another economy is possible, built on local solidarity circuits. Latin American movement that seeks to build another economic model, where human beings & the various dimensions of relationships are privileged. The Solidarity Economy is a proposal to build another possible world that includes the social, economic, cultural, ecological and political aspects of Well-being.
Peace Culture	To share, support & articulate actions and projects co-creating a new culture of peace, love, care for the planet, people and all beings.
Peace Dances	Exploring Dance, open horizons of life, express beauty
Women's Circle	Evolutionary and revolutionary movement, groups of women, contributing to

day workshop which was followed by a 2nd attempt to create a TT group in Curitiba, with initial meetings happening in INs first space. It also failed to develop. The 13 programmes IN runs are all practical aspects of the transition idea and connect with many different groups, SMs, local food producers, educators, artists and individuals. Most activities happen in their space, both inside (IMAGE 72) and outside in the yard or planted areas. Some planting projects also happened in the unused public square next to their space. IN members, acting as capacity as GAIA-PR also lead training courses in other regions in the South of Brazil. IN define themselves: “We are a group of people who chose the art of coexistence as a challenge and put ourselves at the service of personal, collective and planetary transformation” (INSTITUTO NHANDECY, 2018) and their values 1) Persistence 2) Simplicity 3) Creativity 4) Love 5) Respect 6) Caution 7) Integrity 8) Gratitude 9) Connection with all beings, human and nonhuman. They currently have a core group of 13, of which 11 are women, and have an active community of participants in the various programmes of about 200.



IMAGE 72 – SOLIDARITY ECONOMIC GROUP
SOURCE: INSTITUTO NHANDECY (2017)

Edite Faganello and Débora Rocha are the chief protagonists of IN, Débora is an architect and Edite worked in a bank before embarking on this ecological journey. Regarding the origins of IN and the main service it offers, Gaia, IN state:

The Gaia Education Program is an integrated (trans) formation process that incorporates in its mission the Design for Sustainability. It is approved by the UN and represents an action of the Pact with Unesco by the Objectives of the Sustainable Development (ODS). It takes place in more than 40 countries, creating spaces for reflection, generation and exchange of knowledge for the realization of projects of personal and community transformation in favour of the promotion of ecological culture... How is it done in Paraná? It happens since 2011, in Curitiba, with biannual editions. The course is developed through the Mandala of the Four Dimensions: Social, Economic, Ecological and World Vision and in each meeting are invited facilitators of the specific knowledge of each dimension, these facilitators are great source of inspiration for personal and collective change. The Communities of Practice also occur, a space and time for application and experimentation of holistic and integrated knowledge that is accessed during the four-dimensional path. The closing of the Program happens with the Mandala of the 4 Dimensions, where we celebrate the process, recognizing the new skills acquired and the shared dreams in the form of projects. (INSTITUTO NHANDÉCY, 2018, Authors translation)

In 2018, IN will be running their 4th edition of GAIA in Curitiba, which spans over 7 full weekends between March and August. 4 weekends cover each of the 4 Dimensions, with 2 weekends of “Community in practice” weekends and the final weekend to celebrate and close the process. To pass the course, students need to attend at least 90% of the events. Payment for the course is expensive, but IN try to offer a form of sliding scale of payment, a technique common to many practices around the world. Their breakdown of costs and the 4 payment options are:

165 hours of theoretical practical experiences with recognized national facilitators, feeding of all participants during the meetings, 01 immersive meeting during 1 weekend with food and lodging, symbolic remuneration of the team, didactic material and taxes”

1) IDEAL: R \$ 3,550.00 (900€) - includes the payment of the basic costs of the Program 2) MINIMUM: R \$ 2,950.00 (750€)- includes the payment of the basic costs of the Program 3) I want to make a contribution beyond the ideal value, to give the scholarship opportunity to more people 4) None of the options are possible for me, I will contact gaia.nhandecy@gmail.com and make another proposal (INSTITUTO NHANDÉCY, 2018)

Apart from GAIA, the IN space has a busy calendar with all the different events that happen there. IN has an excellent facility with plenty of room outside to allow for different sorts of group dynamics, including planting workshops as the images below demonstrate, they also sometimes use the park (IMAGES 73 – 76).



IMAGE 73 – GROUPS DYNAMICS IN YARD
SOURCE: INSTITUTO NHADECY (2017)



IMAGE 74 – EDIBLE GARDEN
SOURCE: INSTITUTO NHADECY (2017)



IMAGE 75 – PERMACULTURE DESIGN COURSE
SOURCE: INSTITUTO NHADECY (2017)



IMAGE 76 – PLANTING FOOD IN LOCAL PUBLIC SQUARE
SOURCE: INSTITUTO NHADECY (2017)

In 2017 IN co-created an Urban Permaculture Design Course (PDC) with several partners in their space based around 4 weekend long modules: 1) Introduction to Permaculture 2) Water and Energy 3) Agroecosystems 4) Construction Systems. The course aimed to enable participants to make any environment more sustainable, from the systemic management of natural energy, food and water resources. The cost for the 4 modules was \$R 1300 (350 €), there were also 5 separate extra courses and 2 site visits which had different price ranges: 1) Zero Waste and Domestic Composting (50 R = 15€) 2) Technical visit to UTFPR Green Office 3) Solar Panels 4) Human and Biomedical Energy 5) Community gardens and PANCs (Unconventional edible plants) 6) Vertical gardens and Agroforestry. The PC course seeks to adapt rural agricultural ideas to the urban, as outlined by the sketch made during the course (IMAGE 77) which outlines the ideas for Sustainable Ecosystem Planning, based on a series of 4 layers extending from the building where the community live to the wild exterior, with functions in each.



IMAGE 77 – PC PLANNING FOR SUSTAINABLE ECOSYSTEMS SKETCH
SOURCE: AMÃDA MALUCELLI, PART OF IN (2017)

Economy is one of the 4F 4 pillars of GAIA and IN also facilitates solidarity economy as 1 of the 13 courses that run from their space. This is extremely important, because to make real ecological change, people need to be able to find a form of finding livelihoods, or creating jobs or finding jobs, in the areas that they are passionate about and in which they want to devote their time. In this regard, the PDC course is a good example of putting these ideas into action. IN supported a number of other SMs, NGOS or private actors working in these different areas. This brings a small bit of financial income to these groups, helping them develop or strengthen their personal or collective economic base, develop their professional appeal and bring awareness of their group or service to a wider audience. If this ecosystem can develop it brings about change in 2 ways; the city has a wider professional base calling for, or pushing for or demanding, increased ecological change. The community base grows with more people finding work in areas that require change.

Examining the actions for an important day in INs history, 7th of may 2017, we can explore multiple dynamics of how their urban action might bring about change in the city. The “Zero Waste and Domestic Composting” workshop was 1 of the extra PDC courses, with the *Lixo Zero* (Zero Waste) collective invited to facilitate the days activities. It cost \$R 50 per person for the day long activity(15€) with tea coffee and snacks provided and participants encouraged to bring food to share. The images below (IMAGE 78) outline important dynamics which IN facilitate through both the infrastructure of their space, the sort of atmosphere they create and specific dynamics they employ in all of their events which stem from their core value system, based on transformation of individual, community, planet²². 1) A human space that is comfortable and enables highly social moments is critical 2) High % of women taking part (13 / 15 in foto) 3) Women learning skills traditionally seen as male, here drilling of plastic bins 4) Planting of seed for edible plants in unloved public park next to IN house 5) Small planted zone entered in park, with seeds being saved for future use 6) End of each IN activity sees the sacred circle created to focus on work done and celebrate the collective action. The workshop moved from INs house into an unused public park, which IN and friends renamed: “The permacultural occupation of Praça Himeji, which is now baptized Transition Square” (INSTITUTO NHANDECY, 2017)

²² Full photo álbum on IN Facebook page at : <https://tinyurl.com/y7btfh44>



IMAGE 78 – PDC: “WASTE AND DOMESTIC COMPOSTING” WORKSHOP
SOURCE: INSTITUTO NHADECY (2017)

INs events are very well organized, it is clear participants have exceptionally high experiences. This makes their work very attractive, with more people wishing to go to more events. Although part of the last event expanded beyond the borders of their house, most actions happen within the “Transition House”. Most people who participate don’t seem to live in the area, IN is just a workspace, not a living space. It is unclear how much of an impact they have made with the local community, which is in a relatively well to do area of the city. Although they have addressed alternative means of payment, most events are expensive and perhaps not accessible to most Curitiba citizens. The solid root like base they are building, grows slowly but firmly.

4.4.3 Case Study 3: TETO

TETO is an NGO that wants to create “A fair society without poverty, where all people have the opportunities to develop their capacities and fully exercise their rights” (TETO, 2017). *Teto* (roof) is the Portuguese word for *Techo*, which is the short name for the Chilean NGO “*Un Techo Por mi País*” (A roof for my country), which was set up by Jesuit priest Felipe Berrios and a group of university students in Santiago in 1997. Their work mobilizes youth volunteers to fight extreme poverty in Latin America, by constructing transitional housing and implementing social inclusion programs in informal settlements, slums and favelas. In 2001 TECHO began expanding to other countries, they currently exist in 19 countries in Latin American and the Caribbean, and have support offices in the UK and US. TECHO contributed to discussions about the New Urban Agenda (NUA), at HABITAT 3 (HAB 3), the UN’s 2016 talks on climate and urbanism, regarding slum dwellings and poverty. In 2006 TETO was set up in Brazil, São Paulo was the first city, followed by Rio, Parana and Bahia, they are setting up a 5th group in Belo Horizonte. TETO Brasil - Paraná (TETO-PR) are active since 2015 in Curitiba RMC and other cities, including Castro in Parana. TETO’s impact in Brazil in 10 years is (TABLE 19):



IMAGE 79 – TETO VOLUNTEERS BUILDING HOUSES
SOURCE: TETO BRASIL (2017).

TABLE 19 – TETO IMPACT IN BRAZIL, 2006 – 2016

NUMBER	STATISTIC
4	Branches in Brazil (SP 2006, RJ 2013, BA 2014 & PR 2015).
37	Communities with constant work.
100	Communities that have been worked with.
2700	Emergency homes built together with residents of the communities.
26	Community projects undertaken by residents to improve their neighbourhoods.
2	Community headquarters built.
180	Children impacted by Communities Education Programs
35	Mobilized community leaders
40,000	Volunteers mobilized from within and outside communities.

SOURCE: DEVELOPED BY AUTHOR, FROM: TETO (2016)

TETO-PR focuses on 2 main areas; rebuilding of homes (IMAGE 79) and programmes to develop leadership in the communities, they do not simply want to give handouts, they feel that what is best is to offer practical support to communities to better organise themselves to bring about improvements for their own community. The project has high costs, with each new house built in a favela, or community, costing about 7,000 R\$, of which the resident pays a small fraction. TETO-PR have a very organized methodology to allow volunteers greater levels of participation and responsibility in their network. Volunteers must be at least 18 years old and there is no age limit, a lot of them are university students or recently graduated. They have a volunteer group that works fulltime and a series of commissions which volunteers dedicate about 6 hours a week to, in areas such as engineering & admin. They have 4 major building projects during the year, happening during university breaktime, which range from 3 days to 6 days, in Sao Paulo state they also have 12 day builds. Before the building stage there are 2 prior stages, the MV (*Mutirão de Visitas* – Visiting Event) and the *Escuta*, listening meeting.

TETO-PR firstly analyse maps, data and Google maps to identify possible locations of Favelas. During a typical MV weekend, volunteers travel in groups of 4 to 60 different communities to assess the area, establish contact with residents association or elder residents, document the number of houses in need of assistance, photograph and register the current urban reality. The group has a set questionnaire to determine core issues such as services (electricity, sewerage treatment, rubbish collection, asphalt covering on the streets, proximity to municipal services) and local dynamics (history, size, existing challenges, positive points, recent flooding, fires, evictions). Through dialogue an assessment is also made of the community coherence, are there problems such as crime, tensions between

different parts of the community, was there a community association in the past, what does it need to improve the overall wellbeing of the area, what has been their relationship with the local government and public policy. From this initial analysis, TETO creates a short list of groups or houses that it would be willing to help. The *Escuta* stage is built on dialogues made with contacts during the MV, together TETO organise a meeting which all the community are invited to, where TETO outline how they work, make their proposals about future projects and invite the community to decide if they want to see such a project happen. The third stage happens with the participation of the residents of existing homes, or in the case of leadership training, with any members who wish to participate.

TETO Brasil has various forms of funding, many similar to European and US financial systems. These include firstly volunteers paying money to cover costs of their participation in an event, roughly 50 R\$ (15 €) for the MV weekend and slightly more per individual for the building event. Teams of 10 need to raise 7,000 R\$ (2000€). TETO also receive corporate sponsorship from multinational and Brazilian companies. People can also become an *Amigo do TETO* (friend of TETO), by paying a fixed monthly financial transfer, about 35 R\$, which offers volunteers a headstart for participation on building events (IMAGES 80 - 83). The inscription for the last building event in Parana closed after only 6 minutes, showing the level of popularity for the project. TETO also runs street collections, where people take to the streets and ask people to donate directly.

Activists have commented that Curitiba is one of the most unequal cities in Brazil, with this comes much prejudice, ignorance and fear of people living in the favelas in the wider metropolitan area. TETO's work is very important in that it is the first step in breaking down barriers between different communities, for many students, through the work of TETO they physically enter favelas for the first time, meet residents, talk with them, understand their stories, help build homes for them and with them. For many young people this experience can have life changing effects, opening up a sense of questioning as to why injustices and inequality exist in society and how they can be tackled and overcome. As more students participate, they share their stories with family and friends and so the general discourse changes. Equally, for residents in the communities the work is very transformative. Obviously for the buildings, but also in experiences with the guest builders and through the leadership projects that TETO develop with the communities.



IMAGE 80 – URBAN REALITY: QUINHO, JARDIM INDEPENDÊNCIA 23
SOURCE: TETO-PR (2015)

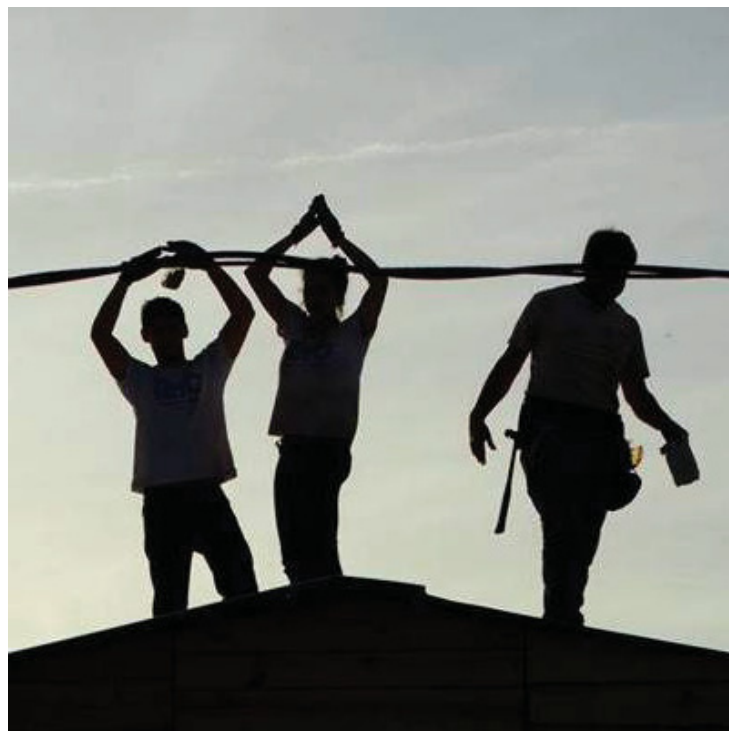


IMAGE 81 – TETO HANDSIGN ON NEW ROOF BUILD
SOURCE: TETO-PR (2015)



IMAGE 82 – UNDERSTANDING OTHER REALITIES
SOURCE: TETO-PR (2015)



IMAGE 83 – THE EMOTION OF BUILDING HOMES
SOURCE: TETO-PR (2015)

²³ Further stories from the communities TETO has worked with are in the 2nd section of the appendix.

Many of the communities TETO work with are in ecologically challenging areas, such as along the riverbanks. These areas often suffer terribly after heavy rains, with entire ground cover turned into mudded areas, ground floors of homes being flooded out, rotting materials and huge inconvenience for families already in great distress. For some people, having TETO come and set up a building weekend, can massively transform the individual day to day well being of some residents. The other aspect is the ability for communities to get more organized. With the help of TETO who have people working professionally in areas including some versed in public policy, practical advice can be given as to the basic rights the residents are entitled to, issues surrounding rights to infrastructure, such as sanitation, sewers, running water, waste collection, electricity and legal issues around home or land ownership. For communities in a chaotic situation, being able to develop leadership roles is the start of becoming a functioning community. Also, with TETOs growing support group, if there are emergencies such as fires or floods, they can quickly get word out to the public to come and assist in whatever way is appropriate.

TETO makes alliances with other social movements and NGOs and can widen volunteers understanding of societal inequality through events. TETO can offer a platform to other groups perceived as more radical by Curitiba establishment. In 2016 and 2017 TETO-PR began work with a new and very vulnerable community in Caximba, 29 of October, which is a 2 year old squatted invasion along the banks of the Barigui river at the southern end of the municipality of Curitiba, in a protected environmental area in the Bugio Reserve. They organized Construction events here and continue to support ongoing infrastructure work through their volunteer commissions. The community was not connected to the public sewage network and originally human wastes went directly into the river, TETO invited MST²⁴ to create ecological human waste disposal systems. During their National Convention in 2016, in the lead up to HAB3, TETO-PR held a daylong forum on social inequality and held multiple discussions with people working with the theme of the Right to the City. In their 2017 conference on “Citizenship and Poverty”, TETO-PR invited the residents association leader of the 29 October community in Caximba, residents from other favelas and representatives from Cicloiguaçu. TETO are breaking prejudices, connecting struggles and communities, building emergency solutions, bringing hope.

²⁴ Radical social movement, described in other area of dissertation and appendix

4.5 RESULTS & DATA ANALYSIS

We will now explore the 3 groups in more detail. Data is shared in the form of tables, maps, images and written text from dynamics during the PAR process of investigation.

This section presents results and data analysis from the questionnaires and analysis of their actions. Detailed maps are prepared for each group and a joint map compares geographical differences between actions of each group. Based on the 4S system, content from responses to questionnaire, maps and subsequent discussions with group actors a chart compares attributes of each group in each of the 4 areas:

Later section has a PAR report for each group, based on the author's participation experiences from time spent with the group.

4.5.1 Results from Questionnaires

Full details of the questionnaire are outlined earlier (TABLE 13, Page 88).

TABLE 20 – CICLOIGUAÇU RESPONSE TO THE QUESTIONNAIRE

#	RESPONSE
1	We are part of the organized society of users of the bicycle that promotes, researches and dialogues with public power to guarantee safety and fairness between the modes of transportation. Our work is in the municipalities of Alto Iguaçu River basin, we are Cicloiguaçu - association of cyclists of the upper Iguaçu.
2	We promoted the world bike club in 2014, hosted Danish exchange students, participated in the agreement between Curitiba and the Dutch university of twente.
3	We have not yet been able to promote international sources
4	We still need members of the association to seek these supports.
5	We have already talked with the municipalities of Pinhais and São Jose dos Pinhais. We need more people to continue the work in these fields. There are ambassadors in these regions, but that have not yet been aligned.
6	We need to fight for the creation of state policies that do not end in the mandate of legislative positions. With few arms in the association, work in the field of decision-makers concentrates on macro policies, although very little is done.
7	We know national and Latin American groups. with similar and diverse formats. most face the same back and forth of the wills of rulers and the same need to prove the truisms.
8	We are a formalized association that has a monthly expense we open possibility of associates and donors, we still raise raffles and profitability through services. We want to migrate to OCIP.
9	We have a formal structure, with working groups, face-to-face meetings, and the need for volunteers to execute field projects and internal counselling. We often call for increased volunteerism.
10	Great opportunities, it is necessary to encourage other groups to organize themselves and create

SOURCE: RESPONSES CICLOIGUAÇU (2017) DEVELOPED BY AUTHOR

TABLE 21 – INSTITUTO NHADENCY RESPONSE TO THE QUESTIONNAIRE

#	RESPONSE
1	<p>The Gaia Education or Gaia Education Program is the cornerstone of the Nhandecy Institute. It was from the experience of the first edition held in Paraná that we felt the need for a "place" where we could practice the vision of sustainability coming from Gaia. Then, in September 2011, the Nhandecy Institute was founded. Since then, we have already conducted 4 editions of the Program, directly involving more than 100 participants and more than 30 facilitators. In 2018, two more editions are being co-created, one in Paraná, beginning in February and another in Rio Grande do Sul, starting in April. As a practice space, the Nhandecy Institute offers practices anchored in the 4 dimensions of the Gaia Education Program, which are:</p> <p><u>SOCIAL DIMENSION</u></p> <ul style="list-style-type: none"> • Non-Violent Communication (CNV); • Dragon Dreaming; • Circular Dance; • Peacebuilding Circles and Conflict Transformation; • Significant Conversations; • Collective "With hands" <p><u>ECOLOGICAL DIMENSION</u></p> <ul style="list-style-type: none"> • Seed Freedom Campaign; • Edible Gardens; • Community gardens; • Food Security; • Conscious Consumption; • Domestic composting workshop; <p><u>ECONOMIC DIMENSION</u></p> <ul style="list-style-type: none"> • Solidarity Economic Circuit (June one year of implementation of the 1st Circuit in Brazil); • Trade Fairs; • Social Currency; <p><u>WORLD VISION DIMENSION</u></p> <ul style="list-style-type: none"> • Gaia Education Program • Women's Circle; • Universal Peace Dances; • Kuaracy Korá - system of self-knowledge of the Tupy tradition; • PDC (Design Course in urban Permaculture); <p>This division of our activities by dimension is a pedagogical way of making comprehensible the main aspect that this practice moves, but it is not segregated from the others. In our world view, everything is and is interdependent and connected.</p> <p>The frequency of meetings and the availability of each experience varies according to the activity.</p>
2	<p>Our main international partnership is with Gaia International, for the certification of the Gaia Education Program. In this process, we pay a certification fee and receive support in international disclosure. Through the agreement Gaia Education has with UNESCO, recognized as one of the most important initiatives for sustainability education, certified programs can obtain certification from UNESCO as well.</p> <p>In the case of the Seed Liberation Campaign, we are signatories of the international pact by http://seedfreedom.info/</p> <p>The "Building Peacebuilding Circles and Conflict Transformation" course is developed in partnership with the Peace & Mind Institute and is supported by the UNESCO Chair for Peace Studies. http://www.pazemente.com.br/</p> <p>In the Solidarity Economic Circuits training courses, we have partnered with CEAAL (http://www.ceaal.org/), Dinamismo Juvenil (http://www.dinamismojuvenil.org.mx/), Comercio Justo México (http://www.comerciojusto.com.mx), or Institute of Advanced Studies for Peace and Development of Mexico (http://pazenlinea.com/), DVV International (https://www.dvv-international.de/) The SOLIDARIUS Network (http://www.solidarius.com.br/).</p>
3	<p>In the case of Gaia Education, we have a protocol to be filled in to obtain the certification of the</p>

	Education Programs that we want to carry out. Guidelines at https://gaiaeducation.org/face-to-face/ede-programmes/certification/
4	The main issue is that not always what they ask we can give (of information) and some terms of commitment that we have to sign that are not / were built with us, they are only protocols that come from there and we have to comply without opening for conversation / sharing.
5	The Nhandecy Institute was founded in Curitiba and has as profile the call to practice activities at its headquarters. This posture strengthens our worldview and recognition in the city and beyond. We have received invitations to conduct courses / experiences in several cities of PR and Brazil. As an example, for the year 2018, we have the call for a CNV practice group in Morretes / PR, PDC in Cascavel, Gaia Education in Rio Grande do Sul, and the project in Céu de Mapiá / AM. In 2017, a Dragon Dreaming was held in Foz do Iguaçu and in Lajeado / RS.
6	Yes
7	We do not know. The institutions we know of work with "isolated" / monothematic practices. We do not know of another institution that has the diversity of practices that we do.
8	We work with various forms of financial exchanges, as they are the only source of funding we have for our actions. One of the main pillars to build community is to embrace diversity. Following this principle, we welcome the needs and offers of our associates (members) and those who come to practice with us (participants). For example, an associate can contribute to the Institute through resources (be they financial, materials) and / or time (work / services for the institute or host / talents / hosting events). In this way, we are able to welcome what is available and necessary for the strengthening of the institute. In the case of the participants, the ways of contributing are diverse. Our activities have various forms of financial exchange, as well as free of charge. We always invite participants to practice co-responsibility with us. So, one of the formats is the spontaneous contribution. In others, we also work with "money pile", where we share the costs of holding the meeting and let the participants decide how much they want to contribute for their work (facilitation / teaching) and then distribute the resources according to the needs / dreams of the people who organized and held the event.
9	Yes. This happens in two ways, at least. One is that in all the meetings we invite the participants to practice co-responsibility, so from the first contact he can take on tasks and / or roles that he wants to experience. Then, if you want to be part of the Institute, we indicate that they live with the community to let in their hearts the intentions of where to put their energy. This can be in an ongoing / dream project, where they can add their talents and / or start a project from scratch.
10	All! It's already happening.

SOURCE: RESPONSES INSTITUTO NHADENCY (2018) DEVELOPED BY AUTHOR

TABLE 22 –TETO RESPONSE TO THE QUESTIONNAIRE

#	RESPONSE
1	We work in some of the most precarious favelas with housing and infrastructure projects, jointly with the residents of these settlements, in order to foster the integral development of these territories. In the RMC we work in Parolin, Caximba and Portelinha (Curitiba); Favorite (Araucária); Jardim Independência (São José dos Pinhais) and Vila Nova (Colombo).
2	TETO is an international organization, present in 19 Latin American and Caribbean countries, as well as offices in the USA and Europe. In this way, just as we often send financial resources to the central office (in order to collaborate with countries that have more difficulties in obtaining funding), we also receive. In addition, it is common for us to receive exchanges for volunteer internships in our offices. But we do not relate directly to multilateral organizations.
3	In all countries we need to follow the same guidelines as the work model, which consists of 4 steps: identification and characterization of favelas; generating participatory spaces and developing concrete solutions (housing, simple infrastructure projects, etc.); establish what we call a "desk", which is an instance to plan and execute programs and projects for the benefit of the community; finally, definitive solutions. In addition, we follow the same values, vision, mission and purposes.
4	We need to pay attention to the implementation challenges in the field of the work model, since the territories have different dynamics and it is necessary to adapt to the particularities that we find.
5	TETO is an international organization, present in 19 Latin American and Caribbean countries, as well as offices in the USA and Europe. In this way, just as we often send financial resources to

	the central office (in order to collaborate with countries that have more difficulties in obtaining funding), we also receive. In addition, it is common for us to receive exchanges for volunteer internships in our offices. But we do not relate directly to multilateral organizations.
6	No. We need to work together with state and municipal governments to find the best solutions for favelas. In addition, our performance depends on a validation about the possibility of working in these territories, considering whether there are land conflicts or other challenges that may impede our performance.
7	Here in Brazil has Habitat For Humanity, which works in favelas to improve housing and infrastructure projects. They are also an international organization. I do not know much about the challenges they face, but I believe they have some similarities. Here in Curitiba also has an organization called Trena Collective, which works
8	It is necessary to participate in specific actions in order to pay for their own expenses (t-shirt, transportation, insurance, food), and most of them work for TETO voluntarily. We also have volunteers working weekly at no cost. Our structure currently has about 40 people who are hired in Brazil to manage the entire operation (they are the only people who receive it). We always set a percentage of vacancies that we make available to those who can not afford the costs.
9	For the volunteers who work weekly in the organization, we carry out a first instance of training in relation to the institution, in which information about our work model, mission, vision, values, etc. is passed on. The whole body of volunteering is invited to participate in the decision-making processes, regardless of the time they are in the organization.
10	We are in the process of mapping out other municipalities of the RMC, so that we can not only expand our work but also have a better knowledge of the favelas of the region. We started our work in Minas Gerais last year and we have an expansion plan for other states, and we must close the year of 2022 with 7 states with TETO performance - we are currently at 5.

SOURCE: RESPONSES TETO (2018) DEVELOPED BY AUTHOR

4.5.2 Mapping the 3 Case Studies

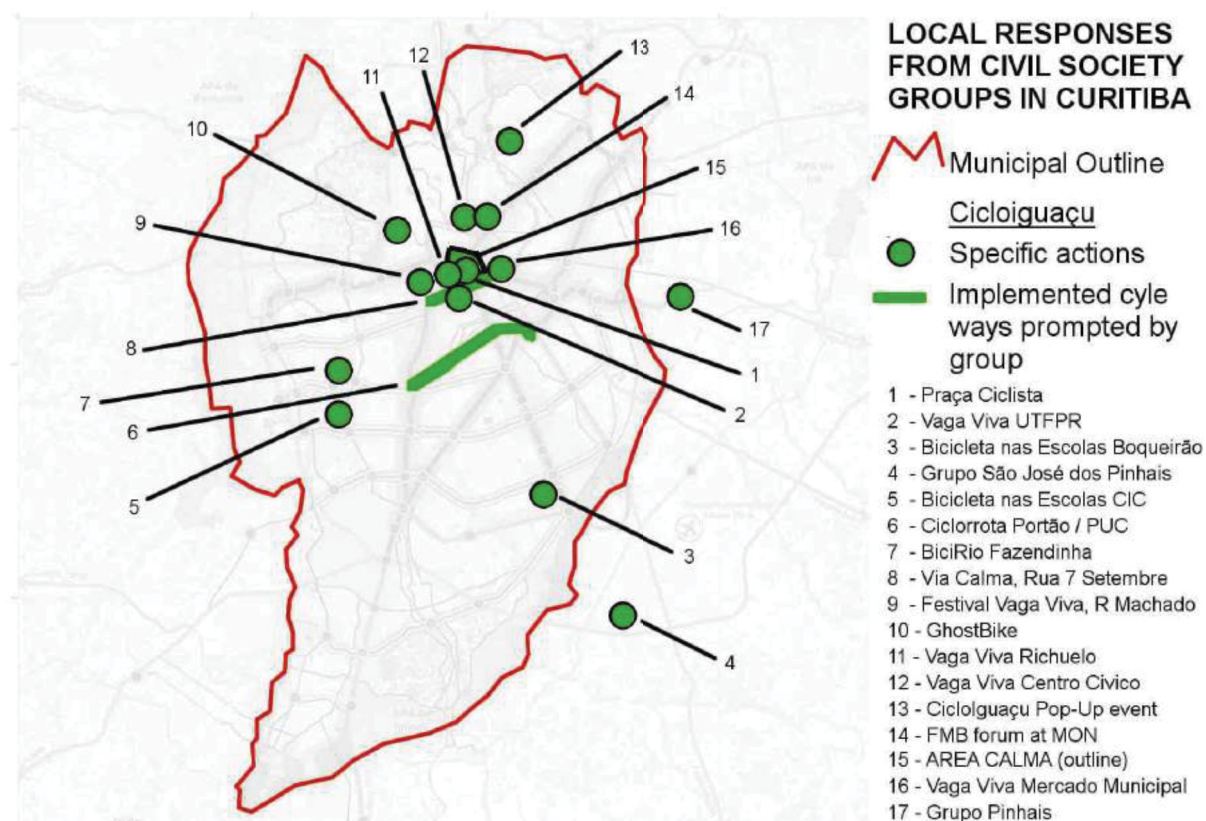


IMAGE 84 – LOCAL RESPONSES FROM CICLOIGUAÇU

SOURCE: BASE-CURITIBA CITY HALL. 2015. ACTIONS, AUTHOR, 2018

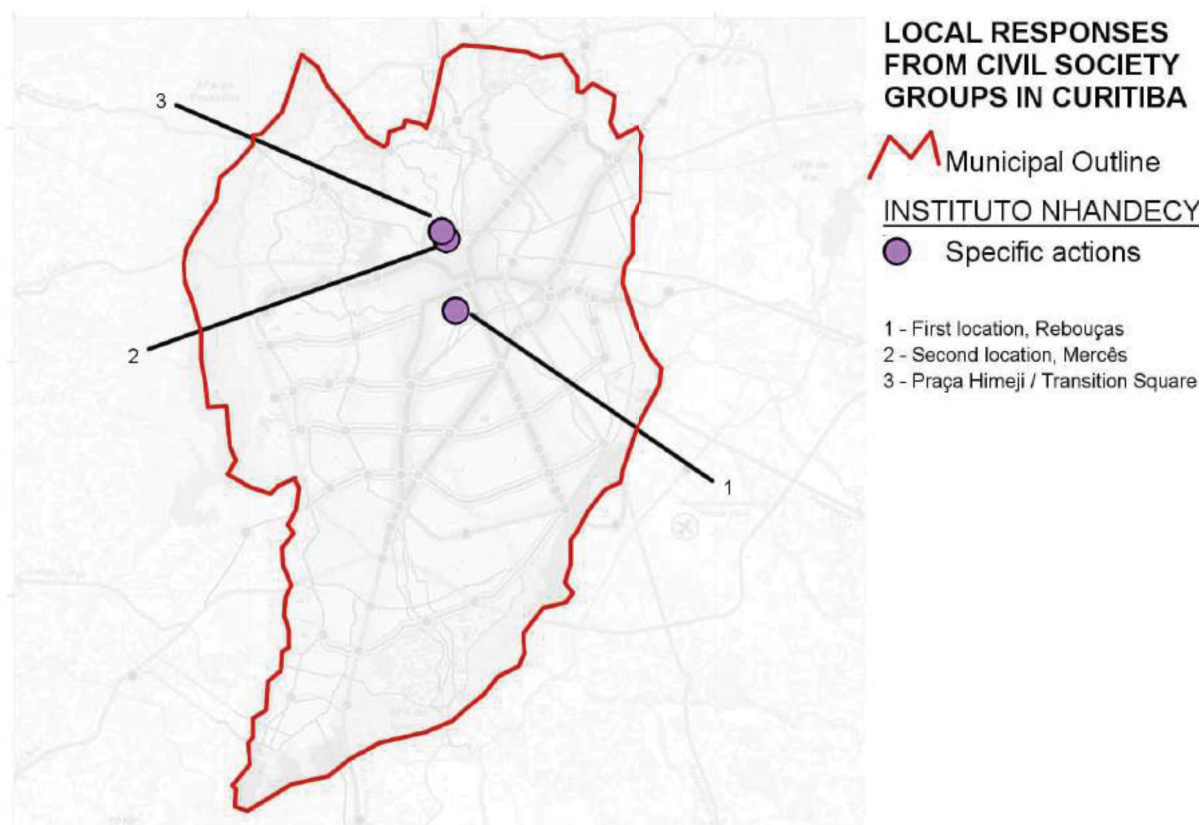


IMAGE 85 – LOCAL RESPONSES FROM INSTITUTO NHADECY
SOURCE: BASE-CURITIBA CITY HALL. 2015. ACTIONS, AUTHOR, 2018

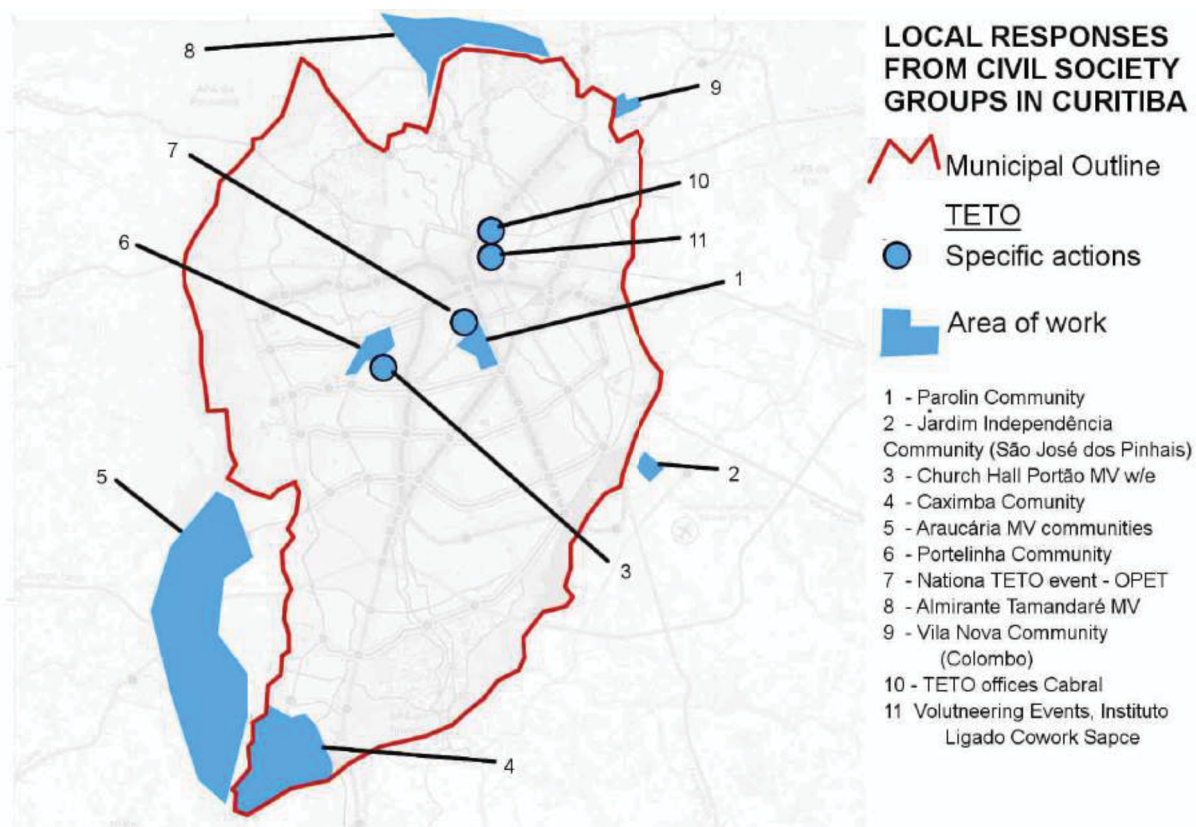


IMAGE 86 – LOCAL RESPONSES FROM TETO
SOURCE: BASE-CURITIBA CITY HALL. 2015. ACTIONS, AUTHOR, 2018

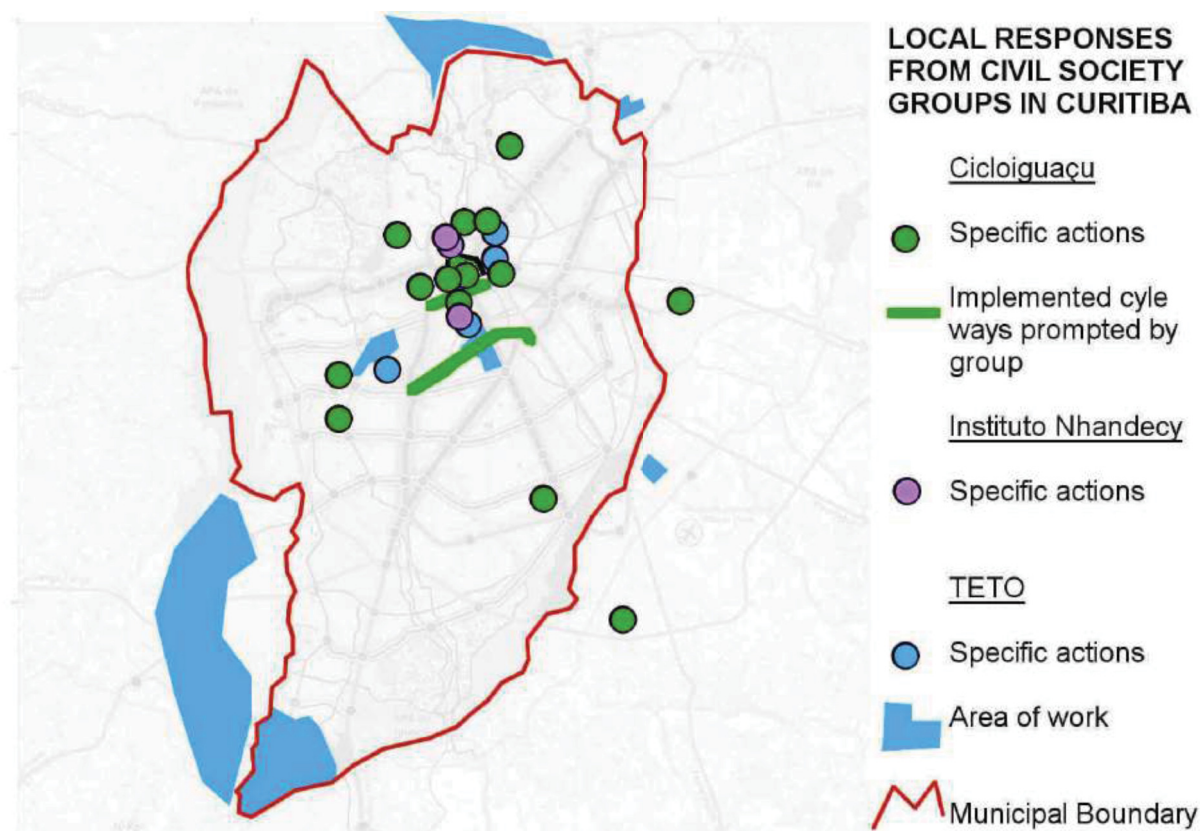


IMAGE 87 – LOCAL RESPONSES FROM 3 CASE STUDIES
SOURCE: BASE-CURITIBA CITY HALL. 2015. ACTIONS, AUTHOR, 2018

4.5.3 Conclusions

TABLE 23 – 3 CASE STUDIES – 4S COMPARISON

SOCIAL: CICLOIGUAÇU	INSTITUTO NHADECY	TETO
CI constantly seek volunteers to join and to help develop projects in areas they are interested in. Their area of action is in the RMC, having some members active in the 2 neighbouring municipalities of Pinhais and São Jose dos Pinhais. Within Curitiba they have had some programmes directly working with schools in more periphery regions. They see their work linked to R2C, while they focus on bicycle rights, they also work for public transport and mention rising costs and disconnected bus systems between different municipalities as an issue of concern for poorer communities in the periphery of the city.	IN have a deeply social structure, including 13 sub groups catering for different communities. Their methodology supports deep communication, including active listening. Social and celebrational dynamics are very important to the group, sharing food and having many workshops based on touch, dance and similar dynamics. Geographically IN are very limited, nearly all their activities happen within their space. On 2 occasions they carried out some planting activities in the public park next door, which is highly underused. Sometimes IN members participate with other actions in the city, but as individuals. GAIA education, their main project, contains an entire module on social.	Totally focused on social issues in Brazil. All work happens in the poorest areas of Curitiba, often in areas with difficult social problems. 6 main areas of work. R2C central philosophy. Build houses and develop leadership in communities. Work on urban policy also. Strong focus on participants experience in process. Develop leadership techniques with people in community. Work in 5 municipalities of RMC.

ECONOMIC: CICLOIGUAÇU	INSTITUTO NHADECY	TETO
CI is locally run and its forms of international support has come in the form of people from outside coming to support their network develop mobility issues in the city in 2 main moments; for the FMB3 forum in 2014 and the through the MoU with Dutch entities, firstly with government in 2015 then with Twete students in 2017. They don't receive any direct financial assistance from outside. All members are voluntary; they raise some cash flow by members paying yearly subscriptions. They sometimes run raffles and social events in the BC. For FMB3 they set up an online funding page with which they were able to cover the costs of the conference, which ensured the public could attend the events for free. From involvement with CI many members have been able to develop academic or private enterprises.	Economic. Very strong. Have many exchange systems & community eco consume group. Practice solidarity economy. Co rent house in Mercedes with 2 other groups. Members can receive payment from activities. Have many free events, but most events are expensive. Practice sliding payment scales. GAIA course full is 3,550 \$R. They send money to GAIA international. Invite other groups to do events, helping them to gain economic independence. Their GAIA Programme has led to some projects being developed which lead to economic independence for people responsible.	International group, money exchanged in both directions. Strong guidelines and methodology in place. Employs about 40 people in Curitiba. Wide group of vols who work on events. People pay for events. Projects need financial input from communities. Projects expose unequal economic realities, work also to develop critical understanding of economic situation. Assisting community leaders to participate in public policy to secure basic infrastructure.

ECOLOGICAL: CICLOIGUAÇU	INSTITUTO NHADECY	TETO
A number of their urban proposals have been realized in the city including bikelanes, the Area Calma, Vaga Vivas, Praça Ciclista, bike parking points. While not constructed with CI funds, they were implemented by the council through ongoing political and cultural pressure from CI and their related communities which they receive strong support from. Carry out academic study in eco urban issues.	They have made changes in the garden of their space and planted some edible plants in nearby square. Their economic programme supports other food producers in Curitiba wider area. Have down much to changes peoples thinking and possibly consumer habits but little impact on the built realm of the city. Influenced new groups that might have made local changes.	Successfully built scores of houses in Curitiba RMC. Also developing infrastructure with communities. Developed ecological toilets with MST in Caximba.

WORLDVIEW: CICLOIGUAÇU	INSTITUTO NHADECY	TETO
CI feel that they have made a very strong impact on society in a short period. Since the beginning they have had a strong political component, engaging in advocacy. In 2014 their coordinator ran for public office, while not running, it further gave visibility to their work and campaigns. In 2016 with the election of Goura, they succeeded in having someone inside local government, which greatly assists furthering their communities views into that realm. They have regular meetings, as 1 of the GTs which meet regularly with Goura. Within their team they have many designers who help on online work, posters, in general and for the FMB3 festival they had a lot of support. Their work was exhibited in an art gallery after the conference too.	NI have assisted many criteria and different diverse groups with their sharing of the space. They facilitate using specific methodology. Very strong space for feminist dynamics too. While much groups interact there, not too much work with them outside of the space. Very strong spiritual component to their work, name coming from local indigenous worldview and dialect. Independent of local and national government	Rapid growth of TETO shows impact. Work deeply transformative for participants. Working at all forms of political activity. Works affects marginal communities, but also shifting perceptions of middle classes and gently forcing a rethink on equality and privilege in Brazil. Very strong communication skills. Structure of International NGO is very advanced, with multi levels of engagement and skill learning. Also developing street charity fund raising.

SOURCE: RESPONSES FROM 3 GROUPS DEVELOPED BY AUTHOR, 2018

4.5.4 Results from Participative Active Research (PAR)

The following are reports from the author's experiences of participating with each of the 3 groups explored in the Case Studies. The author was able to engage with all groups over different periods of time and at different levels of activity in their actions. The following is both a brief report on dynamics about the group and their actions, as well as observations developed by the author arising from the process.

4.5.4.1 PAR with Cicloiguaçu

CI was one of the first groups the author came into contact with upon arrival in Curitiba in February 2014. Having been involved with similar bike centred SMs in Ireland, he was very much looking forward to the upcoming FMB3 and was expecting something similar to what he had experienced with other groups; a passionate, utopian, self organized and messy event. Instead it was truly amazing to see the level of professionalism in which CI had organized the event. Large costs had been reached, including adds for the event appearing in local newspapers, magazines and billboards. The author was very surprised to hear, in a good way, that the entire cost of the conference had been crowd sourced by CI. They had asked the public for assistance, for financial donations, to cover the costs. Why, so that they would not have to ask for a cover charge, thereby making an event completely free, totally accessible to anyone who wished to participate. Equally, if people wanted to get further involved, the group organized in an open manner to allow for peoples input. The quality of the discussions, including the inputs from the high profile guests from Europe, US and other Latin American countries that had travelled made FMB3 one of the best experiences of conference this author has had. Also, the graphics rocked.

Directly after FMB3, was the *Praça Ciclista* project. What is striking is the deep desire CI has to engage with citizens, any citizens, all citizens, which shows that they understand the strong idea of R2C and have built it into their collective mental wiring from the start. Using the call #RecrieSuaCidade (Recreate Your City) was both a call for urban change but also it pointed to the citizen almost saying, "hey, this is your town". CI invited CP and absolutely facilitated it. The design process happened in the BC and anyone could participate, when people made proposals such as carrying out

a questionnaire with the local community, CIs response was “yes, great, will you do it”. This ability to quickly give responsibility to newcomers is commendable and helps create a vibrant atmosphere amongst CI. The actual construction process of the *Praça Ciclista* was really something extremely special, it took a certain form of magic to lead the project in a manner that appeared so laid back and easy going, while also having to accomplish something very complex: The complete building of a new square, through an open public process, while being able to deal with any conflicts if they arose, remembering that the street had been in a dangerous area, with homeless community and drug users. CIs attitude was in no way elitist, they embraced anyone that came to inquire and many of the street dwellers participated. Lastly, about this project, was the depth of the creative community who were part of CI, or who supported them during the construction period, through street concerts, mosaic workshops, artistic interventions, play zones for kids, people who supplied food and coffee for participants. Since the construction of the square, CI continue to be one of the actors who watch the square and assist in the streets well being.

The maturity with which CI grew and evolved has to be commended, their ability to be active both on the outside and the inside of the political theatre, with Goura advancing and acting as a bridge between them and new proposals or areas to think about in regard to shaping the city to become, as FMB3 pointed out: “A balanced city”. This took many forms, which the author participated in, from agora like discussions in the *praça ciclista*, to ghostbike bike rides to mark yet another death in the city due to a lack of bicycle infrastructure in all regions of the city, to discussions with CI in the BC about what projects they want to develop, to many examples where people in their network carry out important research that generates pure data about bike usership at key physical areas in the city, data which can help further advance the policies they have pushed for, or keep ones which are threatened by a change of mayor, such as the current situation with Area Calma. Another factor, which shows their being ahead of the curve, is in regard to citizen equality. Many of the participants in various aspects of the CI movement are women, who outline important dynamics regarding factors that still stop more women getting on bikes. From the MoU CI helped secure for the city, important ideas have been generated, from the Dutch government teams that explored the city with members of CI to the Twente students research investigation, important processes are underway which can only lead to improved urban realities.

4.5.4.2 PAR with Instituto Nhandecy

The first thing that struck you when approaching Instituto Nhandecy's first space in the Rebouças neighbourhood, close to the city centre of Curitiba, was that outside the house were more plants growing than normal, also that some of these were fruit plants including blackberries and small tomatoes. Because there are 13 different groups that use the space for their different gatherings, there are different sorts of communities at each event, who have different reasons for participation and objectives. But IN use the same methodology for all groups. The space itself was clean, ordered, with cushions and special seats that give support when people sit on the ground. The first event the author attended was one of the NVC events. People arrived, and sat in a circle, the IN facilitators outlined the structure of event, how it would work and the time schedule. People went around in a circle, introducing themselves and shortly commenting as to why they were attending. The discussions then carried on till the end, when people helped reorganize the space.

The back of the space had a narrow outdoor area about 2 x 5 metres, within which there was an old bath which had many different plants growing in it, as well as some large trees in big containers. Although small, the area brought feelings of peace and showed that you were in a space where nature was celebrated and loved.

For someone who was involved with TT and GAIA back in Europe, the author had hoped that IN would be the ideal group to develop ecological projects with or a SM to participate with, but the reality was unfortunately not the case. This could have been for many reasons and early language problems on the author's behalf could have been a factor. IN are very inspired by TT and it was very interesting to hear that they had approached the mayors office some years back and discussed developing a project with City Hall. This seemed a little strange as the essence of TT groups in most other parts are built around the active engagement with the local community, regardless of scale, from a tiny village of a few hundred people to a mega city of 10 million people. In February 2016 a prominent member of the TT movement was visiting Curitiba and the author organized a series of events with some of the IN group. The Friday night discussion was completely packed out at the EV, about 70 people and about 30 people paid a considerable amount of money to do the 2 day workshop in 350s NGO space in Gutierrez woods. After the event, came the moment of truth, who was willing to co create a TT project in Curitiba. The first meeting

happened in INs old space and was very well attended. Using the same circular format, everyone shared their dreams, hopes and by outlining practical things they could offer: time, skills, resources. After that, more meetings happened but the numbers quickly dwindled and the project died. From discussions with different people, both Brazilians and foreigners living here, there was a recurring observation. There seemed to be many people willing to do workshops and go to big talks about environmental issues, often paying considerable prices, but that when people were asked to participate in co creating a project together to offer something that was free, they were less inclined. Whereas in Europe, it is often the reverse, with open free SMs often being the most desired way of bringing change, as happens with TT.

In early 2016 IN moved to their new premises and the author went to events there. The new space is a fantastic resource, a large old house with green zones around the edges, a large yard and a welcoming entrance area with large old seats that caters for social interaction and where people leave their shoes before entering. The outside area is wonderful, the bath is there and has a great *Physalis* bush growing in it, as well as plenty more food and aromatic planted areas from different workshops. The interior has a series of rooms that serve as offices, a kitchen and an open area for meetings, workshops, yoga, dancing, films and various other type of events. There is a library space and some small things to buy and a table with flyers, posters and inspirational posters. All dynamics use the same format, starting and finishing in a circle and with a “speaking stick” used. Communication is key, with active listening encouraged. The values and professionalism of the IN team is very present and, like in many movements in Curitiba, it is run mostly by strong women. For people used to these type of spaces and dynamics it is both soft and very powerful, but for people new to such movements, which involves much hand holding and hugging, especially coming from more macho worlds like those that exist in Brazil, the author wonders would they feel intimidated by such dynamics.

The scope of the diverse areas that IN touch upon is fantastic. The Solidarity Economic Group developed a community consumption group, which bought locally sourced products, from ecological sources. A system which helped both the buyers and the sellers, strengthening local economic networks. This practice is also a mechanism that allows for the creation of strong community ties between people, some experienced in these areas, some not. The author was not a part of this consume group, but spoke with people in it and participated in discussions on

occasions. Another thing this group did was set up exchange fairs, where people came with all sorts of things in the very large yard. Again this encourages alternative forms of exchange, as well as creating moments for a community to come together. These practices tie in with this dissertation's earlier conclusions, based on radical ecology proposals, that the required solutions to today's problems need to have an anti or post capitalist logic to them, slowing and halting the endless growth pattern. Although these practices exist, very seldom did the author hear discussions about capitalism as a, or the, source of today's ills. This is a little strange, or perhaps it was referred to in moments the author missed. Perhaps it is an intentional strategic policy of IN, whose method is always peaceful and non confrontational, seeing as when the subject is brought up, it can quickly lead to strong division. Also perhaps the current polarized political climate in Brazil at present gives further need for caution.

Of all the groups the author spent time with during this period, he felt the strangest relationship with IN. Perhaps this was due to being members of the same movements, more or less, or perhaps it was just cultural differences. The author felt that while the structure of IN, their space, what they achieved and more is to highly commended, there were further issues that need addressing. There exists a strong invisible division between IN and the public, between the organisers of events and participants. A key to making change is the ability to be open and flexible, to be able to accommodate new comers and to assist their development, with IN this openness was not felt. Economic issues are critical and IN again need to highly commended for all they do in this area. But a very high amount of events have a high cost, which many or most in Curitiba cannot afford. Yes there are systems in place that attempt to remedy this, but the author wonders about the psychological barriers that exist even with such processes in place. IN are very busy organising their vast amounts of events, but nearly all of these happen within their space. With the few exceptions being irregular short moments of planting action in the park next door. Based on TT philosophy, great emphasis is given to connecting with the local world around where the TT projects happen, and opening pathways to allow for increase participation from this local world. The author did not feel this to be the case at present and still wonders about the actual impact of IN in their physical locality. While busy with their own programme, perhaps IN suffer from lack of connectivity with other groups working on similar issues in Curitiba. With more eco groups interacting directly in the margins of Curitiba society, it would be great to see IN more active there too.

4.5.4.3 PAR with TETO

The TETO-PR facebook page is the major portal for communication in Parana, the sites current image shows the image of the city with 2 contrasting communities, below the towers of better off citizens, above on the steep hillside, the shanty houses of the favela (similar to IMAGE 22). Overlaid on the image is TETO-PR's philosophy: "The Same City, the Same Rights". On October 28th, TETO-PR held its 3rd National Forum on "Citizenship and Poverty", which was "an opportunity to bring together people interested in building a fairer society and to foster discussion about social rights and about how different social groups access and build the city" (TETO-PR, 2017, Authors translation).

The event happened in an education space near the centre of Curitiba and was attended by invited guests from the nearby central favela community of Parolin, residents from the 29 October community in Caximba and a representative from Cicloiguaçu, who outlined how mobility issues affect The Right to the City (R2C). About 40 people participated, mostly existing TETO volunteers, some for first time and it ran from 9am till 2pm, with water and juices available for people.

A key factor to making movements work is in the small details; the ease by which a newcomer can easily connect, open up and feel part of something. With this, especially in the somewhat extreme factors that TETO works with in a seriously class divided Curitiba, there can be difficult feelings for some people to identify with or react to. For some people, having never knowingly had direct contact with someone from a favela and possibly brought up in a culture of fear and prejudice about such communities, it can be difficult or strange. With this in mind, it was interesting to see how TETO used techniques used by other social movements to work with these dynamics, to maximize participation. After a brief introduction to TETOs work, the day was divided into 3 sections; 1) Breaking the ice 2) Short Films 3) Goldfish bowl. The first involved guests being invited to join up into 5 different groups of 2, with strangers to answer 5 specific questions, with each person given about 2 minutes to respond for each question. The questions ranged from what would be a perfect day, to what were personal victories in life, to how do ideas of love relate to life in community. These one on one moments offered people the chance to reflect on their realities or dreams and listen to others perspectives, for some it can provoke emotional opening up, as people move beyond their comfort zones, for some it was the first time to

shake hands with a *catador de lixo* (informal rubbish collector). The 2 short films outlined realities that less privileged citizens faced in Brazil, as well as highlighting issues such as hunger, consumption, racial profiling and issues of power in commercial areas. The films shown were *Ilha das Flores* (island of flower, 1989) and *Hiato* (Gap, 2009). The third section used the “Goldfish bowl” technique, whereby 4 chairs are placed in the middle of the circle, 3 chairs must be occupied throughout, as the 4th is occupied, another person leaves one of the other chairs. The outer circle engage in active listening and enter the inner circle if they wish to. Those within the inner circle have an open discussion about issues related to the theme.

On a November weekend the *Mutirão das Visitas* (Visiting work event) event happened in 30 different communities in Curitiba RMC, 15 in Araucária, 15 in Almirante Tamandaré. 40 volunteers spent 48 hours together, sleeping 2 nights in same space together and doing work in a church hall in Portão, as well as 2 days of fieldwork. Volunteers paid 45 R\$ to cover expenses of the weekend, brought eating utensils and sleeping bags. First night started with an ice breaker followed by TETOs objectives being outlined and introduction to the research methodology, including reading through the 6 page questionnaire that was used to analyse communities current situations in regard to services, emergency housing, community organisation and issues of peace.

TETO enables initial volunteers to assume leadership roles, by participating in the various commissions they have, this included volunteers who had experience in favelas acting as leaders. 10 teams were created with 2 leaders and 2 new volunteers, each team had a car. 6 communities were visited over the 2 days, 3 in each municipality. Discussions were had with locals and analysis was made, culminating in filled in questionnaires, map of locations of housing needing assistance and recommendations for if and where TETO could assist. On average, the communities visited existed for more than 20 years and a key discussion point was existence of, or lack of, community organisation. Of the 6 communities, only 2 had residents associations, some had whatsapp groups. In some there were recent and ongoing invasions on municipal land at the edges, some had problems with drugs and violence, some had a lack of cohesion between different religious groups, principally established Catholics and newer Evangelicals. Most residents interviewed sited high levels of freedom and strong sense of community in their areas, for most the greatest problems were infrastructural, such as lack of asphalt covering of dirt

roads. TETO clearly stated they were not currently in a position to help every community they visited, but that their information would be used to help with municipal public policy. No community was aware directly of TETO, but 2 mentioned they had seen a TV report about groups working in favelas.

TETO organised things very well, with young volunteers running the weekend capable of both the explaining the issues while transmitting sense of joy and fun. Each new volunteer was given a tee-shirt with the blue logo and text on the back relative to the action. Great care was taken to create a safe space, which works with all volunteers being asked to form work teams at times to help share the work of preparing food or cleaning the space and toilets. There were 4 rules to avoid tensions; keep kisses till after the event, drug and alcohol free event, keep work boots outside, don't litter. There were some moments for education, including use of a real estate board game to understand urban dynamics, others to explore different dynamics relating to poverty. Food was prepared by a commission, people took what they needed for the day, there was also a small evening meal. A letterbox wall was created, whereby envelopes were placed on a wall and people were encouraged to write messages for each other. The last group work exercise happened in the car, where an audio file from a woman in a community in Rio was played, where she outlines her frustration about certain issues about life in the favela, outlines her lack of knowledge about her political rights and calls for help to improve things for her community. The team responded to her call with practical suggestions as to how best she and her community could advance, groups choose to write a short piece, record an audio file, or share their views. The final event included the last group circle with the presentation from each of the 10 groups and a discussion about how TETO hopes to advance this project. Finally before packing up and leaving, a final circle was formed and people spoke, then shouted "Isso é só a começa. Não para" (This is just the start. Don't stop) then started jumping wildly together and roaring the phrase, like football fans. A fitting end for a very special event with deep experiences shared. TETO-PR are growing quickly and making real change in peoples lives in the poorest parts of Parana, but the way they are doing it makes more people want to be part of the change. This is why they are such an exciting group. They make community.

TETO announce the registration time for events well in advance. They opened the registration form for the November weekend of construction at 19h, but at 19.06h it was already filled out. This shows that TETO is growing very quickly in Curitiba.

4.6 CONCLUSIONS

Brazil has many problems that need urgent attention. It is still a deeply divided, unequal and violent country. The current economic crisis that began in 2015 has provoked wider instability, greater economic insecurity and rising unemployment. The austerity measures imposed on the country in 2016 might further exasperate these factors; if Brazil follows the same road Greece and Spain went down post 2008. Increasing precariousness and lack of resources is leading to increased violence and insecurity. So much so, that in 2018 the army took control of policing in Rios streets. There are many factors to Brazils woes that include; endemic corruption, deep class divides, inadequate education, exclusion of vast sectors of society by political classes and a lack of concern, understanding and solidarity from prosperous sections of society for poorer sectors. Addressing these, to create a safer and equal society is a big challenge. With no single right way, different groups are trying different strategies.

Curitiba is justly celebrated for much of the urban steps it has taken over past decades since Lerner's work started in 1971, but since the early 1990s it has "rested on its laurels". In recent decades the wider city has struggled to cope with a rapidly expanding population that crosses municipal boundaries and requires a combined response from all city halls within the "Urban Stain" working together. While Curitiba's marketing campaign championed itself as a model and ecological city in the 1990s, it avoided growing difficult and inconvenient social realities, such as the huge increase of irregular occupations (*favelas*) since the 1980s in the periphery. Harsh divides now exist between traditional communities in Curitiba's centre and newer communities, leading to increased insecurity and Curitiba RMC recently becoming one of Brazils most violent cities. Curitiba's earlier urban design and planning successes happened in a very top-down fashion, due to being under a military dictatorship till 1985. There are growing calls for Curitiba's government to involve citizens in the planning process in a more thorough way, to increase their democratic participation in the process of making the city, including: Moura 2005, Irázabal 2009 and *Mobiliza Curitiba* 2014.

As attempted and demonstrated by many groups currently active in Curitiba, a 2 pronged strategy is required. One area must focus on developing cultural issues so as to make it easy and attractive for people to participate in movements seeking ecological urban change, a key to this is that actions and movements are as accessible as possible, including economically, and aim for the most diverse culture

possible. The second area is to engage in the political process to effect desired change. By working on local issues and developing projects in a community fashion, new connections are being made based around developing trust, enjoying the social aspect together and allowing everyone the opportunity to participate in the core group area where decisions are taken collectively. There have been various victories recently in Curitiba, which shows that it is an exciting moment for the city, which could lead to far greater victories soon. The author identified the possibility that the structure developed with councillor Goura and the various working groups could further develop into a full Municipalist project for the city, similar to Barcelona.

A key to success for various actors is to be able to unite and work together on similar campaigns or for similar objectives. The author noted that initially there was considerable problems in this area, for a multitude of reasons, but that there has been considerable shifts recently here with new groupings coming together to co-create new projects. Intrinsically linked to this is the location of actions and to which audience they are targeted. While many great projects exist in Curitiba, many focus in safe, established and wealthier parts of the city and appeal to, or are frequented by higher classes of society. To truly face the interconnected crises, including the ecological, projects and movements need to connect more with communities in the periphery, the informal communities, favelas and areas that have higher social problems. The interaction between established ecological groups and established communities, can vastly improve things for both parties. If eco projects are structured in an accessible way, there is a very high chance that the project will expand rapidly. There are many barriers to still break down in Brazil society and any group that is working along these lines, is attempting to open a new route. The most recent project of over 15 groups that have commenced work together in Parolin offers great hope.

For projects to be successful, there are a range of factors to consider, including seeing real built change in the urban realm, and not just it being talked about. Successful projects work with good organization and communication systems in place, but also the ability to share responsibility, find uses for the skills that everybody possesses and create a buzz about the project which is filled with hope, joy, celebration and a collective sense of real adventure. The massive challenges in today's world can not be something only for the professionals. The real key is to create the means where all citizens can access and participate in the process to make a better world; Where every man, woman and child can help make their city.

5 FINAL CONSIDERATIONS

Avoiding humanities destruction rests on our collective ability to fix our cities. Cities have become the frontline where appropriate action is quickly needed to avert climate crisis and build resilience to deal with future shocks.

The term Sustainable Cities is long established, but struggles to embrace newer concepts that cities must deal with today, such as resilience and regeneration. This dissertation suggests that the loose and still undefined term of Ecocities could replace the Sustainable Cities term by incorporating all current concepts, along with those of the future, to encapsulate the utopian dream of what cities could be, or have to yet become. These cities must be for all citizens and not the few. They must deal with the full city and all associated challenges, and not just create gated communities or regions only for the wealthy, isolated from the wider urban system they are part of.

This dissertation suggests that the GEN ecovillage methodology, practice and global community should form the basis for a true global Ecocity network. GEN consists of more than 10,000 communities, including two urban districts, with all continents of the planet represented. Their network is a culmination of 20 years of experience by a diverse global community. GEN desires a planetary scale up, to where “every village is an ecovillage, every city a green city”, without losing their 3 core values: 1) Being rooted in local participatory processes 2) Integrating social, cultural, economic and ecological dimensions in a whole systems approach to sustainability 3) Actively restoring and regenerating their social and natural environments. The Ecocity challenge is to understand how such a vision can be implemented globally in today’s massive cities, Municipalism offers solutions here.

To get the ecological part correct in our communities and planet, we need to get the economic part correct, both are intrinsically connected. Ecological economic systems live within the limits of life on earth and not on the model of endless growth. The current system of global capitalism under the present form of Neoliberalism is not compatible with such a sustainable system; therefor an end to, or break from, capitalism is required. The base of the required transition centres on reconstructing our relationships with energy, most of all; oil. While many forms of alternatives exist, this dissertation suggests an Ecocity model that is part of a PostCapitalist solution for the planet, whose pathways are based on Creative Descent responses to the twin challenges of global warming and peak oil, as being developed by many group today.

Common agreement from time spent with groups investigated in Curitiba for this dissertation is that the city is not a Sustainable City, or an Ecocity. While it had some years of enlightened planning, albeit many during a severe authoritarian military dictatorship, the wider city struggles today with a quickly growing metropolis. Municipalities need to work together better, with mayors' offices committing to truly sustainable development and facilitating an increased structure of Citizen Participation. Despite Right to the City enshrined in Brazilian law and growing calls from civil society for the Curitiba government to increase participation of its citizens in the process of making the city, until now the government has not truly facilitated the type of structures or processes that civil society wishes to see. Although both City Hall and IPPUC engaged in "participatory reunions" during recent master planning events in all the municipalities regions, these were deemed to be token gestures.

Since new direct action focused movements in 2007, Curitiba has started to be transformed through Social Movements based on radical ecology, citizen participation, inclusivity and a vibrant cultural movement to effect political change in the urban landscape. In recent years these movements have matured, won many victories and began to occupy municipal institutions. With the growth of more community gardens and similar small-scale projects, new citizen networks are forming in the public realm, facilitating a much-needed face-to-face means of engagement that fosters trust. With the election of Goura in 2016 and his Municipalist type structure that is open to all citizens, a great opportunity exists to develop these local citizen movements and projects into something deeper, as is happening currently with other global cities and communities such as Barcelona and Rojava in Syria. Facing the global ecological crises, citizen movements could transform Curitiba into an Ecocity. Far from being idealistic hopes, this dissertation has presented the severity of the crisis humanity faces, so in this regard, these changes are not merely what would be desirable, they are what are necessary.

Citizen Participation is the key to achieving these objectives by building local accessible solutions based on shared economic, educational, political and cultural values. The challenge is to multiply existing solutions and connect the communities. Thereby greening the city, fixing the city. While different groups who are working in these areas have developed a wide range of strategies, this dissertation has attempted to demonstrate that the most successful actions, projects and movements are based on open and highly accessible projects, where possible with actions

happening in the public realm, so as to facilitate a public dialogue about the quality of public space and citizens rights. This involves a view on economic matters and issues that affect the poorest communities, such as the lack of interconnectivity between the bus services of different municipalities coupled with ever increasing costs of bus fares. The projects that are effecting change today are also seeking to diversify their movements, not merely creating actions in safe areas of the city and hoping or expecting periphery communities will attend for ecological reasons, instead by connecting with these communities, understanding the day to day realities and challenges faced, sharing viewpoints and understanding and working together on shared objectives. In these situations there is no hierarchy of better or lesser communities, both have much to learn from, and share with the other. Together both are stronger. A challenge for all groups currently active is to improve techniques for working together, as it has been noted that problems have existed here in past years. Some current projects point to perhaps a new chapter where diverse groups are now working together, especially the recent *Coletivos em Movimento* activities in Parolin.

The reality of both Brazil and Curitiba is that they sharply divided communities. Brazil has huge issues of poverty and crime which negatively affect governing forces that include the urban domain and the public realm. The risks are real, the violence is extreme. What is required are truly holistic solutions, which address the economic and past histories of inequality. With the current economic crisis, things will probably get worse before they improve. It is not enough to simply build eco communities for the rich few in Brazilian society. Equally, while expensive eco high tek solutions might indeed be part of the solutions to today's problems, what is required is a vision of what a more peaceful and sustainable Brazil might look like. A vision that is created through diverse dialogues and moments between different actors, from all different sexes, classes, colours, backgrounds. Following this, structures need to be put in place that can facilitate all citizens to become part of the transformation of society. Where possible, economic opportunities need to be adequately addressed, if people have no alternatives, drugs, gangs and violence offer the only solutions. If the wealthier classes keep avoiding this reality, things will probably get worse.

In finishing, despite the grave problems in Brazil, this dissertation is hopeful that the required change is not only possible, but already happening. Groups examined here offer glimpses of a more ecologically sound and fairer society, built on Citizen Participation. Hopefully this dissertation can assist this collective adventure.

6 CHRONOGRAM

TABLE 24 – CHRONOGRAM

CHRONOGRAM FOR THE DISSERTATION														
DISSERTATION STAGES		2017										2018		
		M	A	M	J	J	A	S	O	N	D	J	F	M
1	Engagement with Civic Society Groups	x	x	x	x	x	x	x	x	x	x			
2	Specification of Themes	x	x											
3	Read Relevant Literature	x	x	x	x	x	x							
4	Elaboration of Questionnaire			x	x									
5	Generate Questionnaire for the 25 Groups				x	x								
6	Analysis of Data				x	x								
7	Participation with the Group of 3				x	x	x	x	x	x	x			
8	Analysis of Data								x	x	x	x	x	
9	Conclusions										x	x	x	x
10	Defense of Dissertation													x
11	Final Revision of Dissertation													x
12	Final Submission of Dissertation													x

SOURCE: AUTHOR, (2017).

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APPENDIX


TABLE 25 – GROUP ANALYSIS - 30 GROUPS ACTIVE IN CURITIBA


	350 Brasil			#1
	Where Founded:	USA	Open for public participation	YES
	When:	2008		
	Group Type:	NGO	Receives International support	YES
	Still active / When ended	YES		
350.org is an international environmental organization founded in the US by Bill McKibben, encouraging citizens to take action to reduce carbon dioxide emissions to 350 parts per million and to pressure world leaders to address climate change. Brazil HQ is in Curitiba, set up national No Fracking direct action groups. Brazil group are based in Bosque Gutierrez and support local NGO and social movements, through free use of space for events. Also participated in FUSA and Ecocity week. Also organized <i>Virada Climatica</i> events in São Lorenzo Park and the old city ruins, participate with more groups. https://350.org/pt/				


	A Rede Social Brasileira por Cidades Justas e Sustentáveis = Brazilian Social Network for Sustainable and Fair Cities			#2
	Where Founded:	?	Open for public participation	?
	When:	?		
	Group Type:	NGO	Receives International support	?
	Still active / When ended	?		
The Brazilian Social Network for Fair and Sustainable Cities (Social Network of Cities) brings together Brazilian movements and initiatives that aim at social transformation by focusing on the public policies of the cities where they are located. Its members work in search of fair and sustainable cities and the Social Network of Cities is characterized by being a space for the exchange of information, the realization of strategies and joint actions, in order to stimulate the operational capacity of each one of them, to guide themes nationally and legitimize the initiatives that integrate it. https://www.facebook.com/RededeCidades/				

	Bicicletaria (The Cultural Bicycle Storage Space)			Cultural	#3
	Where Founded:	Curitiba	Open for public participation	YES	
	When:	2011			
	Group Type:	Soc Bus	Receives International support	?	
	Still active / When ended	YES			
A Bicycle shop and Performance / event venue in city centre, a Social business. A bike mechanics space, shop, workspace, storage space, artistic space, cultural space, allowing social movements to work out of the space. <i>Praça Ciclista</i> was designed here. 1 location for world bike forum 2014, many international artists come and perform. Served as space for 2015 <i>Janela climatica</i> , received live stream from Paris during COP21. A social business, an art movement. People pay to store bikes. Won Swedish award for social entrepreneur. Patricia won Curitiba award for women entrepreneur. Participated in #Ecocity2017 Curitiba event. https://www.facebook.com/bicicletariacultural/					


Continued


	CASLA (Casa America Latino) (Latin American House)			#4
	Where Founded:	Curitiba	Open for public participation	YES
	When:	1985		
	Group Type:	POLITICAL ORG	Receives International support	YES
	Still active / When ended	YES		
A space in city centre. A bike mechanics space, shop, workspace, storage space, artistic CASLA (Latin American House) was founded in June 1985, in Curitiba, Paraná, on the initiative of many of the people of Paraná who are engaged in the democratic resistance of the continent. Supports initiatives including Indigenous groups in Parana, Faxinais communities, immigrants, MST, urban social movements. Part of international CEPIAL network, host forums, talks, cultural events, academic meetings, trainings in the city. Have Legal support group also. https://www.facebook.com/caslacuritiba/				


	Centro Cultural Humaita (Humaita Cultural Centre)			#5
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2006		
	Group Type:	NGO	Receives International support	YES
	Still active / When ended	YES		
For the valorization and visibility of african art and culture in Curitiba and parana. A center for the Study and Research of Afro-Brazilian Art and Culture. Created as response to institutional and veiled racism that promotes the erasure of identity and culture of Afro-Paranaans. It develops actions in the areas of art, culture and education aimed at enhancing and giving visibility to this portion of 28% of blacks from Parana. Supports street festivals and runs workshops on Samba, Capoeira, Afro Dance, hip hop. Currently group redesigning abandoned space under road viaduct near bus station: Revitalization of the Capanema Viaduct. https://informativocentroculturalhumaita.wordpress.com/				

	Cicloiguaçu (Associação de Ciclistas do Alto Iguaçu) (Cyclists association of high Iguaçu)			#6
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2011		
	Group Type:	?	Receives International support	YES
	Still active / When ended	YES		
Cyclists Association of <i>Alto Iguaçu</i> was founded to create an interface of constructive dialogue with the public power to consolidate the development of cycling mobility policies in the city. They are responsible for the 3 rd World Bike Forum in the city (2014), construction of cycling lanes, via calma, area calma, urban bike rides, Culture month in September. Their ex president was elected local city councillor to further their urban agenda, through open participative political process. They helped create a MoU between the city and Dutch politicians and Tweete University. They successfully turned a derelict space into new urban square, the praça ciclista. http://www.cicloiguacu.org.br/				


Continued


	Circo de Democracia Circus of Democracy			#7
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2016		
	Group Type:	Political Event	Receives International support	?
	Still active	?		
<p>A political circus existed for 10 days in the in Santos Andrade Square, city centre (August 5 to 15). One of the country's largest public forums on Democracy, education, politics, justice, art and culture, economics and communication, created by 50 entities, in months after political presidential impeachment in Brazil. An open process of a number of GTs (working groups) focusing on different areas. A similar circus tent event in previous decades in push for democracy. All events were open and free. GTs kept active after the event, despite event of circus.</p> <p>https://www.facebook.com/CircodaDemocracia/</p>				


	Code For Curitiba			#8
	Where Founded:	USA	Open for public participation	YES
	When:	2015		
	Group Type:	?	Receives International support	YES
	Still active / When ended	YES		
<p>A local chapter for the Code for America Brigades, volunteer groups that collaborate with local government and community partners to build new tools that help with local civic issues. Code for America supports Brigade chapters with resources, tools, and access to the wider civic technology movement. Vision: a more agile government and create a significant change through technology. They have organised a series of Hackathons in the city, with different groups, including the city mayors office, NASA and others. They have hackdays twice a week. Free to participate, they move from place to place co creating, building. Create start up groups.</p> <p>http://brigade.codeforamerica.org/brigade/Code-for-Curitiba/</p>				

	Coletivo Mão na Terra (Hand in the Earth Collective)			#9
	Where Founded:	Curitiba	Open for public participation	YES
	When:	?		
	Group Type:	Collective	Receives International support	?
	Still active / When ended	YES		
<p>A collective whose aim is to restore the planet's ecosystem, to help social and ecological projects to produce the maximum possible positive impact. Develop guidelines to support a project aimed at impact in some way. They are inspired by principles of urban permaculture and agro ecology. They are transforming an urban space in <i>Centro Cívico</i> near the centre into a food production zone and cultural space, through weekly <i>Mutirões</i>, through social collective action, which involves eating together, educational events, films and yoga / meditation.</p> <p>https://www.facebook.com/coletivomaonaterra/</p>				


Continued


	COURB (Instituto de Urbanismo Colaborativo) (Collaborative Urbanism Institute)			#10
	Where Founded:	USA	Open for public participation	YES
	When:	2015		
	Group Type:	NGO	Receives International support	YES
	Still active / When ended	YES		
An NGO that calls itself “Collaborative Urbanism Institute”, aims to assist in the elaboration of urban solutions adapted to the cultural, economic, social and environmental realities of Brazilian cities, through the union of academic, professional and urban experience in different realities. COURB intends to assist municipalities and communities in their construction and social and urban structuring. We believe in collaborative construction, the power of social participation, and community engagement as agents of transformation. They organised their first conference in Curitiba 2016, which had urban workshops in the streets. http://www.courb.org/				


	Curitiba em Transição (Transition Towns Curitiba)			#11
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2016		
	Group Type:	Social Mov	Receives International support	YES
	Still active / When ended	AUG 2016		
<p>A local node of the international social movement set up in Curitiba after Juan Del Rio led training workshop and talk, to promote his book, first about the movement not in English. Monthly events set up in “monthly café” social format in different locations. Project never really took off despite large interest at start and many groups working with the “transition” ideology in the city. Helped create Indigenous Week. Subsequently the “Transition house” was set up by 3 different groups and more Transition type projects exist, just not as official initiative. Transition projects have existed in Brazil for many years and Rio has had recent national training events.</p> <p>https://www.facebook.com/CuritibaemTransicao/</p>				

	Curitiba Lixo Zero (Zero Waste Curitiba)			#12
	Where Founded:	Chile	Open for public participation	YES
	When:	1997		
	Group Type:	Collective	Receives International support	YES
	Still active	YES		
<p>A group that seeks to improve urban practice to increase recycling in all forms to reduce urban wastes, an initiative of the Lixo Zero Brazil Institute, a civil and non-profit organization that is part of the Zero Waste International Alliance. They do workshops, participate in forums, conferences, music festivals, artistic interventions and have created a “zero waste week” in Curitiba since **. They assist in beach and river clean ups outside the city too. They are organizing the upcoming Climate hackathon. A side group offers hard plastic cups in place of disposables. Participated in both FUSA and Ecocity Curitiba festival.</p> <p>https://www.facebook.com/curitibalixozero/</p>				


Continued


	Dona Cida Occupation			#13
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2016		
	Group Type:	Irregular Community	Receives International support	?
	Still active / When ended	?		
<p>Dona Cida was a land occupation in the periphery of the city, by a group of up to 200 families, in the neighbourhood called Cidade Industrial de Curitiba (The Industrial City of Curitiba - CIC). They were organized with the group MTST Parana. At certain times, families were offered housing within the PMCMV programme, but this later did not materialize. In April 2017 Dona Cida was again being threatened with eviction, marches in the city happened in support of the community. Local councillor Goura spoke up for the community in the civic offices.</p> <p>https://www.facebook.com/somostodostiradentes/</p>				


	Garibaldis & Sacis (Carnaval Samba community)			#14
	Where Founded:	Curitiba	Open for public participation	YES
	When:	1999		
	Group Type:	Music group	Receives International support	YES
	Still active / When ended	YES		
<p>A samba group that performs as a <i>bloco</i> in the city carnival in February. Have regular urban events including musical parades in the city, side project includes <i>Cachorras</i> (doggies) Burlesque group. Facilitate music teaching and training. An important process that builds tolerance & works for inclusion of all; women, people of colour, LGBTI communities. Engages with municipality about increased role of diverse cultural events in city. Through music has strong connections with many groups in the periphery of the city, builds mutual support and understanding, like <i>MaCidade Azul</i> group in Fazendinha. Participated in Ecocity conference.</p> <p>https://www.facebook.com/garibaldise.sacis/</p>				

	Horta Comunitária de Calçada Cristo Rei (Cristo Rei footpath community garden)			#15
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2016		
	Group Type:	Community Garden	Receives International support	?
	Still active	YES		
<p>An urban gardening initiative that challenged a municipality law and won. City law dictates that many streets have green areas only for grass. A group transformed a strip into a community garden, received notice to remove all, received fine, did not pay, prepared to fight for garden, and received huge support from other groups, including online petition. Invited to meet mayor, mayor gave support. Still waiting for law change. Based in urban permaculture and agro ecology principles. Wall transformed into art space for mosaic project. Offering support for similar actions and gardens in city for meaningful urban eco transformation.</p> <p>https://www.facebook.com/hortacristorei/</p>				


Continued


	Instituto (Nhandecy Instituto)		Nhandecy	#16
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2000		
	Group Type:	NGO	Receives International support	YES
	Still active / When ended	YES		
<p>Nhandecy is the "Mother Earth" in Tupi Guarani language. This group works in ecological and peace transformation. They are 1 of 3 groups in the "Transition house", they offer courses and facilitate a economic solidarity system, run courses on Gaia Education, Urban Permaculture, Dragon Dreaming, Conflict Transformation, Women's Circle, Non-Violent Communication, amongst others, were involved in attempts to set up Transition Towns group on 2 occasions. Strong spiritual element. Have urban gardening in their space and started transformation of local square. Mostly led by women.</p> <p>www.institutonhandecy.org.br</p>				


	Jardim das Amoras Brancas (The Garden of the white berries)			#17
	Where Founded:	Curitiba	Open for public participation	YES
	When:	?		
	Group Type:	?	Receives International support	YES
	Still active / When ended	Aug 2017		
<p>Laboratory of Urban Permaculture space 3km from city centre, in home of project owner, beside Belem river and Sao Lorenzo neighbourhood. Temporary open shared living space and public zone for activities, including garden, dry toilet, fruit forest, workshops, vegan pizza, artistic events and cinema club; organic food exchange, Kundalini Yoga classes, holistic therapies, Reiki; Seed Bank Creole, natural foods, clay oven, vegetable garden, Libertarian Gardening, organic production. Recently closed, owner moved to space outside city.</p> <p>https://www.facebook.com/JardimDasAmorasBranças/</p>				

	Laboratório de Cultura Digital (Digital Cultural Laboratory)			#18
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2013		
	Group Type:	?	Receives International support	YES
	Still active	YES		
<p>An experimentation project for the collaborative formulation and development of free digital technologies. Initiative of the Ministry of Culture and the Federal University of Paraná, the project attends Culture Points, agents, organizations and cultural networks. In a simple and friendly way, it offers sites, knowledge management systems, cultural maps, tools of digital democracy and online mobilization. Part of Latin American Meeting of Digital Culture that integrates, articulates agents and strengthens the free networks of exchanges between cultural organizations of our continent. Organised for ex Uruguay president Mujica to speak in Curitiba.</p> <p>http://laboratoriodeculturadigital.redelivre.org.br/</p>				


Continued

	Movimento Nossa Curitiba (Our Curitiba movement)			#19
	Where Founded:	Curitiba	Open for public participation	?
	When:	x		
	Group Type:	NGO	Receives International support	YES
	Still active / When ended	?		
Their mission is to mobilize diverse segments of society to build and commit to an agenda and a set of goals, articulate and promote actions, aiming at a more just and sustainable city. Directors Aparecida de Fátima Machado Nogarolli and Rafael Gomes de Oliveira... Linked to UN Sustainable cities and related networks. Organised public event before Curitiba mayor elections, where candidtates commiteed to sustainable city goals.				
https://www.facebook.com/MovimentoNossaCuritiba/				


	Movimento dos Trabalhadores Sem Terra (MST) (Landless Workers' Movement)			#20
	Where Founded:	Parana	Open for public participation	YES
	When:	1984		
	Group Type:	Social Movement	Receives International support	YES
	Still active	YES		
<p>Radical direct action landless peasant movement. They often come to the city and create short protests, which can be seen as urban moments, including setting up of <i>acampadas</i> (temporary tent community) In 1999 they occupied the public space in front of the State parliament and turned the space into a food production zone. Wide level of support outside of state, part of <i>Via Campesina</i> Global network for food security. Support organic agriculture and agro ecology, supply food to the city and promote solidarity economics.</p> <p>http://www.mst.org.br/</p>				

	Nacion Pachamama (Nation Pachamama, Mother Earth)			#21
	Where Founded:	Curitiba	Open for public participation	YES
	When:	x		
	Group Type:	NGO	Receives International support	YES
	Still active / When ended	YES		
<p>A space in city centre. A bike mechanics space, shop, workspace, storage space, artistic space, cultural space, allowing social movements to work out of the space. <i>Praça Ciclista</i> was designed here. 1 location for world bike forum 2014, many international artists come and perform. Served as space for 2015 <i>Janela climatica</i>, received live stream from Paris during COP21. A social business, an art movement. People pay to store bikes. Won Swedish award for social entrepreneur, check if receive funding prize. Patricia won Curitiba award for women entrepreneur. Participated in #Ecocity2017 Curitiba event.</p> <p>http://www.nacionpachamama.com/</p>				


Continued


	Ocupação Cultural Espaço da Liberdade (OCEL) Cultural Occupation Space of Freedom)			#22
	Where Founded:	Curitiba	Open for public participation	YES
	When:	October 2014		
	Group Type:	Squat Collective	Receives International support	?
	Still active / When ended	May 2015		
A half-year occupation of a 25-story building at the end of <i>rua Sao Francisco</i> in city centre, abandoned for over 20 years, next to <i>Praça Ciclista</i> . A living space created by and for homeless people, with support from urban activists. Horizontally organised group influenced by similar movements, including anarchist, using direct action as a form of political action. Created urban community garden at ground level with weekly agro ecology classes. Organised hip-hop and street art events and invited groups from the periphery into the city centre. Peacefully left after eviction orders. Building still abandoned, ground space now car park. https://www.facebook.com/willcapapreta10/				


 SALVEMOS O BOSQUE GOMM!	Parque Gomm (Gomm Park)			#23
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2013		
	Group Type:	Direct Action	Receives International support	?
	Still active	?		
A conflict about public space. Cities most luxurious new shopping centre was built next to a public park of significant cultural heritage that contained old woods, requiring construction of new street for car park access. Local community occupied proposed road, built community garden, on agro ecology principles with creole seed bank, had cultural events every Saturday; artists, musicians, tai chi, workshops, kids play zones, talks. Their symbol was Obelix's dog, a symbol of resistance. referred to the shopping centre urban model as Godzilla, only for the rich few. Street was built December 2016. Some people still organize events, garden still exists. https://www.facebook.com/SalvemosOBosqueDaCasaGomm/				

	Programa Cidades Sustentáveis (PCS) (Sustainable Cities Programme)			#24
	Where Founded:	São Paulo	Open for public participation	YES
	When:	2010		
	Group Type:	NGO	Receives International support	YES
	Still active / When ended	YES		
<p>Aim is to sensitize, mobilize and provide tools for Brazilian cities to develop in an economically, socially and environmentally sustainable way, divided into 12 axes inspired by the commitments of Aalborg (Denmark) on SD, 2 extra due to perceived differences between Brazilian and European realities. The commitments consider local community participation in decision-making, the urban economy preserving natural resources, social equity, the correct spatial planning, urban mobility, local and global climate and biodiversity conservation, among other relevant aspects.</p> <p>www.cidadessustentaveis.org.br</p>				


Continued


	Peacelabs (Previously Cheer For Peace)			#25
	Where Founded:	Curitiba	Open for public participation	?
	When:	x		
	Group Type:	Web platform	Receives International support	YES
	Still active / When ended	YES		
<p>PeaceLabs is a web platform that helps large corporations optimize their social investments & social projects to find resouces they need via collaboration Technologies. A monitoring social projects technology company that offers a solution that allows companies, institutes or business foundations to closely and dynamically monitor the impact and results of each of their social projects. It was previously called Cheer For Peace and worked at developing support for marginal communities. Before World Cup game in the city it organized an event in the Vila Torres favela, it also organised support for communities in Rocinha, Rio da Janeiro.</p> <p>http://peacelabs.co/</p>				


	Praça de bolso do ciclista (Cyclists pocket park)			#26
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2014		
	Group Type:	Physical Community	Receives International support	?
	Still active	YES		
<p>A project led by Cicloguaçu, this was the urban transformation of a small corner site in the old city centre of Curitiba that had been abandoned for over 20 years. The building design and construction happened through an open public participative project via <i>mutirão</i> (public collective work events), facilitated by city mayors office. The project rejuvenated a street that had been a dangerous drug area, the transformation brings new challenges, that team participate in resolving. Cinema and events happen in the square. Was part of Ecocity festival. Was formally opened by city mayor on world car free day, September 22nd 2014.</p> <p>https://www.facebook.com/PracadebolsodoCiclista/</p>				

	Sociedade Global (Global Society)			#27
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2011		
	Group Type:	NGO	Receives International support	?
	Still active / When ended	YES		
Facilitators of the Transition from EGO to ECO, from old paradigms of scarcity, separation and competition to a more collaborative and integrated society. Bringing together sectors, actors and citizens to dream and realize together a more just, sustainable and peaceful society, promoting a culture of transformation for the common good. 1 of 3 groups working in <i>The Transition House</i> , involved with setting up many forums in the city, encouraging citizen participation, creation of Sustainable Cities, open collaborative processes. Also does training. http://www.sociedadeglobal.org.br/				

Continued

	TETO (ROOF)			#28
	Where Founded:	Chile	Open for public participation	YES
	When:	1997		
	Group Type:	NGO	Receives International support	YES
	Still active	YES		
<p>TETO is the Portuguese version of TECHO. The word TECHO means roof in Spanish and is short for the longer title: “Un Techo Por mi País” (A roof for my country), a youth led group active in Latin America & the Caribbean. Through the joint work of families living in extreme poverty with youth volunteers, seeking to overcome poverty in slums. TETO is convinced that poverty can be permanently eradicated if society as a whole recognizes poverty as a priority and actively works towards overcoming it. They rebuild accommodation in slums, participated in HAB3 and NUA discussions. Encourage volunteerism and charity work in Brazil since 2007.</p> <p>http://www.techo.org/paises/brasil/</p>				

	Vagas Vivas (Live parking spaces – ex car park spaces)			#29
	Where Founded:	Curitiba	Open for public participation	YES
	When:	2014		
	Group Type:	Public Spaces	Receives International support	?
	Still active	YES		
<p>Parklets in Brazilian Portuguese, began as car park spaces turned into temporary green or public spaces, as urban action similar to park.ing movement. In recent years city has created at least 2 permanent spaces, 1 outside municipal market, 1 outside SESCOI in centro. Temporary spaces also created for different festivals, including one side of a full street for a local community festival, also some created in architecture schools. Part of growing movement for a more human city, activists hoping that City will copy recent Sao Paulo legislation and allow for more small parks in the city.</p> <p>https://www.facebook.com/vagaviva/</p>				

 WRI BRASIL — ROSS CENTER	WRI Brasil Cidades Sustentáveis (World Resources Institute Brazil – Sustainable Cities)			#30
	Where Founded:	USA	Open for public participation	YES
	When:	1982		
	Group Type:	NGO	Receives International support	YES
	Still active	YES		
WRI Brasil Cidades Sustentáveis works to make cities more inclusive, safe and enjoyable for people. It assists governments in the implementation of projects and public policies in the areas of mobility, urban development, governance, road safety, climate and resilience. WRI transforms great ideas into actions that connect the environment, economic opportunities and human well-being. WRI operates in more than 50 countries, with offices in Brazil, China, the United States, Europe, India and Indonesia. Brazil offices in Porto Alegre and Sao Paulo, but work all over Brazil. Also have blog about urban solutions called The City Fix. wricidades.org				

SOURCE: AUTHOR, (2017).

TABLE 26 – SOME OF THE TETO COMMUNITY
(ALL TEXT + PHOTOS FROM TETO-PR FACEBOOK PAGE, AUTHORS TRANSLATION)



VILMAR BUHHOLTZ (Jardim Independência)

Date of birth: 4/24/54. Age 63 years old

Also known as QUINHO by the community, TETO – Brazil's first community project in Paraná was with Vilmar, when neighbors and volunteers engaged in a mutirão (community work event) to clean up his land. His story, overshadowed by gaps in memory and the interweaving between fantasy and reality, is told with help from friends who support him every day. Quinto is too weak to work, and receives meals from the nearby houses, but rests in the most vulnerable house in the neighborhood. Together, residents and volunteers are working to change this reality and to bring more dignity to this gentleman. At the lead of the residents are three women, all so different from each other, who share the same strength and dedication for their neighbor's wellbeing: D. Nelza, D. Neiva & Tatiane. We volunteers have already seen Quinho in his bad moments and now we are watching the cheerful man behind the stretched face, he even sang to us while we installed the panels of his new dwelling. In addition to promoting safety and health, his new home intends to rescue this gentleman's dignity and self-esteem, who was forgotten by time, but received by the Jardim Independência community. (Text & photo: Erms Cacilds, 2015)



D. NAZIR (Jardim Independência)



IRENE DOS SANTOS (Jardim Independência)

Born on 04/08/1964 in Dourados, MS, came to the six months of life in the interior of Paraná. She lived with her 2 children, Patricia & Peterson, and 2 grandchildren in São Joaquim do Pontal. With no strength for the country life, she moved to Vila Lorena in Curitiba, where she spent about two months. As they could not pay the rent, D. Irene and her family went to Jardim Independência through their friend Marines and lived there for six years. D. Irene worked until the middle of April this year with the separation of recyclable materials where she earned R\$ 200 per week and now hopes to get a new job soon. Her support made all the difference in TETO Brazil's first construction in Paraná last year, now the family of her daughter Patricia Moraesteve have the same opportunity. Now it's her turn. Her house, very small and on uneven ground, was dismantled last week to make room for the new house. With her new roof ready, D. Irene had added a piece of wood to the old house to have space to receive the child if he ever wanted to come back. (Photo: Lucas Gabriel)



JESSICA, JEAN & BABY ISABELLA, (Jardim Independência)

Jessica and Jean are the parents of Isabella, two and a half years old, and Abner, six months old. Jessica, 21, and Jean, with nearly 23, are full of life who met six years ago and have been married for five years. She lived until 11 in Cascavel

Born on 03/21/65, is 50 years old. He had three biological children and one adopted. She was still a teenager, around 16, and is now a widow. He lives with his new partner (Jairo) at one of his children's homes because the house where he lived is not safe due to flooding problems and inadequate electrical installation. The house was also without access to the street after the neighboring land was sold. D. Nazir says that once he heard a revelation in the church that he said he would live in a favela and no way out, he met the Jardim Independência 5 years ago through his friends Floriano



IZABEL PEREIRA LEITE (Jardim Independência)
Born in Sergipe, 68 years old, she has lived in Jardim Independência for three years after spending many years living in several cities in the north of Paraná. She was married twice and has lived with one of her daughters for two months. She can not stand it because she is very independent and likes to live alone. He has six children, 20 grandchildren and could not count the number of great-grandchildren. The resident suffers from floods, leaks and termites. The new house will help her have a safer home and a healthier life. Always very organized, she is already planning the organization of the garden in her new house.
(Text: Erms Cacilds & photo: Lucas Gabriel 2015)



D. IRENE & HER FAMILY (Jardim Independência)
Demolishing the old house.
(Photo: Bruna Gregorini, 2015)

and came with her family to Jardim Independência where her father's family already lived. He only met his father at the age of 13 but only had contact with him after he left home at the age of 16. Until then he lived with his mother and stepfather in Jardim Itália. Jessica worked as a nanny for Jean's younger siblings, her biological father's children with his new wife, they then fell in love and decided to live together in Jessica's parents house. He studied until 7th grade and her 6th grade. Today he works as a bricklayer and she works as a janitor. They want their children to have a better life and not get married anytime soon. Jessica's family returned to Cascavel a few days ago and she misses them. They dream of a good home and a decent life. Their main concern is flooding, they lost everything in June 2013 when the water rose suddenly while they took their daughter to the doctor. The couple believes they will have a better life with the new home and have even regained the mood to continue looking after the yard and repairing the fence as recent demolitions of homes in the neighborhood have had a major impact on the residents. His mother and stepfather are also happy with the building of their new home, helping the couple by giving them a room and space to prepare and serve lunch to volunteers on construction days. (Text: Erms Cacilds / Foto: Paula D'Albuquerque 2015)



D. Izabel (R) + Her daughter (L) (Jardim Independência)
Two warriors who lead life with great strength, courage and determination. Izabel has 20 grandchildren and many great grandchildren



SNR. LUIZ (Caximba) (Photo: Bruna Gregorini, 2015)



D. IZABEL (Caximba)

A clearly tough woman who has been through many difficult things in life. She has lived for more than a year in Caximba and has six children, with only two living with her: Leonardo (8) and Kauan (13). The two are charming, and the eldest son has some deficiency unknown to them. Izabel does not currently work, because if she works, she does not receive a benefit because of Kauan's disability. To get extra income and pay, besides the expenses of the house, the payments for the land and Kauan's diapers, Izabel takes care of a friend son. She is very excited to be building with TETO.

(Text & Photo: Bruna Gregorini, 2015)



DONA ANA, DAUGHTER & GRANDDAUGHTERS

In the community Portelinha, will be built 5 new homes and one of them will be the family of Dona Ana, 54, who lives in the community there is one. Dona Ana, 54, is married, has four children and takes care of her 6-month-old twin grandchildren. One of her children is mentally handicapped. Her income comes from the sale of cotton candy and she earns, on average, 40 reais per month. Recently, her granddaughter was hospitalized, which left her quite shaken. She lived in the street for two months before entering the community, and her house is quite humid. She has a vision problem. She trusts her neighbors and friends of the community. (Text & Photo: Bruna Gregorini, 2015)



ELISA AND CHILDREN (Caximba)

(Photo: Bruna Gregorini, 2015)



D. DANIEL (Caximba)

(Photo: Bruna Gregorini, 2015)



Andressa (Caximba)
(Photo: Bruna Gregorini, 2015)



Jéssica(Caximba)
(Photo: Bruna Gregorini, 2015)



Liliane, Lucas, Endro Henrique and Vitória. (Portelinha)
Lucas is 23 years old and Liliane is 36. With them lives João Victor (14), Lucas (8), Endro Henrique (2), Micaeli Vitória (9) and the newborn Victoria. Liliane has two other daughters of 17 and 12 years who live with their grandmother, outside the community. Endro and Lucas stay at school all day, and João Victor studies in the afternoon. His daughter Victoria had surgery recently. The family's current home is in a very precarious situation, with part of the floor tilted and breaking up. The new house of TETO will provide much more security for the family. (Text & photo: Bruna Gregorini, 2015)



ROSANGELA & DAUGHTER ELEN (Caximba)
(Photo: Bruna Gregorini, 2015)



JESSICA, JEAN & BABY ISABELLA
(Photo: Telizia Prado, 2015)



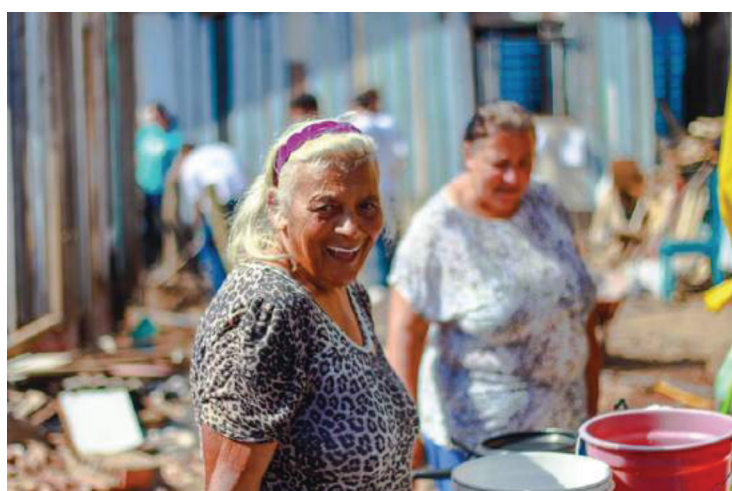
NAZIR & JAIRO
(Photo: Telizia Prado, 2015)



QUINHO AND FRIEND
(Photo: Telizia Prado, 2015)



IRENE DOS SANTOS (Photo: Telizia Prado, 2015)
(Photo: Telizia Prado, 2015)



IZABEL PEREIRA LEITE
(Photo: Telizia Prado, 2015)



THE NEXT GENERATION
(Photo: Telizia Prado, 2015)

SOURCE: AUTHOR, (2017). ALL TEXT FROM TETO-PR FACEBOOK PAGE, AUTHORS TRANSLATION. Available at: <https://www.facebook.com/groups/tetobr.pr/photos/>

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